16-86

Funds

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. ~~321.~~ 55

THE EQUATOR MINING AND SMELTING COMPANY, PLAINTIFF IN ERROR,

vs.

GEORGE W. HALL AND CHARLES H. MARSHALL.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLORADO.

FILED OCTOBER 11, 1879.

SUPREME COURT OF THE UNITED STATES.

No. 321.

THE EQUATOR MINING AND SMELTING COMPANY, PLAINTIFF IN ERROR,

vs.

GEORGE W. HALL AND CHARLES H. MARSHALL.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLORADO.

INDEX.

PROCEEDINGS IN STATE COURT.

	Original.	Print.
Placita of State court	3	1
Complaint	4	1
Summons and return	7	2
Petition for removal	9	3
Bond for removal	11	4
Clerk's certificate, State court	14	5

IN CIRCUIT COURT UNITED STATES.

Amended complaint	15	6
Answer	18	7
Stipulation for trial by court	20	8
Orders: Trial by court	21	8
Finding in first trial	25	10
Finding vacated; new trial	26	11
Leave to file additional count	27	11
Additional count to complaint	27	11
Orders: Second trial	30	12
Verdict of jury	35	15
Judgment ordered	36	15
Judgment	37	16
Motion for new trial granted	38	16
Motion for third trial denied, and certificate of division	39	17
Certificate of division of opinion	40	17
Bill of exceptions	42	18
Writ of error	253	94
Citation	256	95
Clerk's certificate	258	96

1, 2, & 3 Pleas in the circuit court of the United States for the district of Colorado.

GEORGE W. HALL AND CHARLES H. MARSHALL *vs.* THE EQUATOR MINING AND SMELTING COMPANY.	For possession of specific real property & for damages.

Be it remembered that heretofore and on, to wit, the 25th day of November, A. D. 1878, came R. S. Morrison, esq., an attorney of record of said court, and filed in said court a certain transcript of record and proceedings had in the district court for the county of Clear Creek and State of Colorado, in a certain cause in the said district court lately pending, wherein George W. Hall and Charles H. Marshall were plaintiffs, and The Equator Mining and Smelting Company was defendant, and the said transcript is in words and figures as follows, to wit:

Placita of State court.

STATE OF COLORADO,
County of Clear Creek, ss:

Pleas filed in the district court of Clear Creek County, in the
4 first judicial district of the State of Colorado, in vacation, before the January term, A. D. 1879. Honorable William E. Beck, judge of said first judicial district.

GEORGE W. HALL, CHARLES H. MARSHALL, plaintiffs, *vs.* EQUATOR MINING & SMELTING COMPANY, defendants.	№ 2033.

Be it remembered that heretofore, to wit, the plaintiffs in the above-entitled action, by their attorneys, filed in the office of the clerk said district court of said county, their complaint in said action in words & figures following, to wit:

Complaint.

STATE OF COLORADO,
County of Clear Creek, ss:

In the district court of the first judicial district of said State, in and for said county.

GEORGE W. HALL & CHARLES H. MARSHALL, plaintiffs, *vs.* EQUATOR MINING AND SMELTING COMPANY, defendants.	

The plaintiffs complain and allege:

5 1. That the defendant is a corporation organized under the laws of the State of Illinois.

2. That the defendant, on or about the twenty-first day of August,

A. D. 1878, entered with force and arms upon the lands of plaintiffs situate in said county, to wit, The Colorado Central lode mining claim, survey lot No. 261, in Griffith mining district, the same being then and there in the possession of the plaintiffs, and then and there being worked by them as a developed and continuing silver-bearing mine; and between that date and the tenth day of November, A. D. 1878, without the leave of the plaintiffs did dig, mine, and carry away out of and from said lode *said lode* mining claim, large quantities of silver-bearing ore of great value, to wit, in amount and value, as plaintiffs are informed and believe, one hundred tons, of the total value of thirty thousand dollars ($30,000), and between said dates, at the county aforesaid, converted the same to its own use.

3. That between said dates the defendant blasted, dug into, and carried away the earth, ore, and substance of said mine, and sunk and drifted and stoped out the substance of the same, and thereby hindered the plaintiffs in the further development of said premises as a continuing mine, and decreased the value of said land.

6 4. That the plaintiffs are damaged by the acts of defendant in the premises in the sum of thirty thousand dollars.

JAS. B. BELFORD.
R. S. MORRISON.
WM. R. GORSLINE.

STATE OF COLORADO,
County of Clear Creek, ss:

George W. Hall, being duly sworn, saith that he is one of the plaintiffs in the within complaint; that he hath heard the same read and knows the contents thereof; that the same is true of his own knowledge, except as to those matters which are stated on information and belief, and as to those matters he believes it to be true, and that he makes this verification on behalf of his coplaintiff as well as on his own behalf.

G. W. HALL.

Sworn and subscribed before me this 12th day of November, A. D. 1878.

[L. S.] CH. H. WENZEL,
Notary Public.

7 And upon the same day and year, to wit, the day and year last aforesaid, and upon the filing of said complaint, summons issued out of and under the seal of said court in said action, in words and figures following, to wit, and upon the 15th day of Nov. A. D. 1878, the same was returned and filed in said action.

Summons & return.

STATE OF COLORADO,
Clear Creek County, ss:

First judicial district. In the district court within and for the county of Clear Creek.

GEORGE W. HALL, CHARLES H. MARSHALL, plaintiffs,
vs.
EQUATOR MINING AND SMELTING COMPANY, defendants.

The people of the State of Colorado send greeting to above-named:

You are hereby required to appear in an action brought against you

by the above-named plaintiff, in the district court within and for the county of Clear Creek, and answer the complaint filed therein, within ten days (exclusive of the day of service) after the service of this
8 summons upon you, or judgment by default will be taken against you according to the prayer of said complaint.

This action is brought to recover 30,000 dollars damages, for that whereas the defendant on or about the 21st day of August, A. D. 1878, entered with force & arms upon the land of plaintiffs, to wit, the Colorado Central lode mining claim, survey No. 261, in Griffith mining district, said county, & being then in possession of plaintiffs & worked by them as a developed & continuing silver-bearing mine; did dig into, blast, & carry away large quantities of silver-bearing ore, earth, and substance of said mine of great value, and sunk, drifted, and stoped out the same and thereby hindered plaintiffs from developing said mine, &c.

And you are hereby notified that if you fail to appear and answer the said complaint as above required, the said plaintiff will apply to said court at a term thereof to be begun and holden at Georgetown, on the first Tuesday of January, A. D. 1879, for the relief demanded in said complaint.

Given under my hand and the seal of the district court in and for the county of Clear Creek, at Georgetown, this 13th day of November, A. D. 1878.

[L. S.] H. H. ATKINS, *Clerk.*

9 Sheriff of Clear Creek County.

Return.

Received this summons this day of A. D. 187 . I hereby certify that I have duly served the within summons on this 13th day of November, A. D. 1878, by delivering to Chas. Bellamy, agent of the Equator Mining & Smelting Company, defendant named in said summons, in said county of Clear Creek, a true and correct copy of this summons.

Dated this 13th day of November, A. D, 1878.

T. JEFF. WATTS, *Sheriff.*

Afterwards, to wit, on the 22nd day of November, A. D. 1878, the said defendant filed in said cause its petition and bond in words & figures following, to wit, respectively:

STATE OF COLORADO,
Clear Creek County:

In district court.

Petition for removal.

GEORGE W. HALL, CHARLES H. MARSHALL *vs.* EQUATOR MINING AND SMELTING COMPANY. } Petition for removal to the circuit court of the U. S.

To said court and to the honorable Wm. E. Beck, judge of said court:

10 Your petitioner, the Equator Mining and Smelting Company, respectfully shows to this honorable court that the matter and amount in dispute in the above-entitled suit, exceeds, exclusive of costs,

the sum or value of five hundred dollars; that the controversy in said suit is between citizens of different States, and that the petitioner was at the time of the commencement of this suit and still is a citizen of the State of Illinois, and that the said plaintiffs, George W. Hall and Charles H. Marshall, were then and still are citizens of the State of Colorado.

And your petitioner offers herewith a bond with good and sufficient surety for its entering in said circuit court of the United States on the first day of its next session, a copy of the record in this suit, and for paying all costs that may be awarded by said circuit court if said court shall hold that this suit was wrongfully or improperly removed thereto.

And it prays this honorable court to proceed no further except to make the order of removal required by law, and accept the said surety and bond, and to cause the record herewith to be removed unto
11 said circuit court of the United States for the district of Colorado, and this petitioner will ever pray.

H. M. & WILLARD TELLER,
G. B. REED, *Att'ys for Petitioner.*

STATE OF COLORADO,
Arapahoe County:

I, Charles T. Bellamy, being first duly sworn, say that I am the agent and superintendent of the Equator Mining and Smelting Company, and the only agent or officer of said company now within this State; that I have heard the foregoing petition read and know the same statements and allegations therein contained are true, as I verily believe.

CHARLES T. BELLAMY.

Subscribed and sworn to before me this 15th day of November, A. D. 1878.

[L. S.] JAMES M. LOMERY,
Notary Public.

Bond.

Know all men by these presents, that we, Charles T. Bellamy, John Turck, Wesly A. Hunter, of the county of Clear Creek, State of Colorado, are held and firmly bound unto George W. Hall and Charles H. Marshall in the penal sum of five hundred dollars, the pay-
12 ment whereof to be well and truly made unto the said George W. Hall and Charles H. Marshall, we bind ourselves our heirs, representatives, and assigns jointly and severally, firmly by these presents.

Yet upon these conditions: The Equator Mining & Smelting Company, having petitioned the district court of the first judicial district in & for the county of Clear Creek, State of Colorado for the removal of a certain cause therein pending, wherein George W. Hall & Charles H. Marshall are plaintiffs, and the said Equator Mining & Smelting Company is defendant, to the circuit court of the United States in and for the district of Colorado:

Now, if the Equator Mining & Smelting Company, the petitioner, shall enter in the said circuit court of the United States, on the first day of its next session a copy of the record in said suit and shall well & truly pay all costs that may be awarded by said circuit court of the United States, if said court shall hold that said suit was improperly

removed thereto, then this obligation to be void; otherwise in full force and virtue. Witness our hands & seals this day of November, 1878.

JOHN TURCK. [SEAL.]
CHARLES T. BELLAMY. [SEAL.]
W. A. HUNTER. [SEAL.]

13 And afterwards, to wit, on the 25th day of Nov. an order was filed in said cause, in words and figures following, to wit.

Order removing cause.

STATE OF COLORADO,
County of Clear Creek, ss:

In the district court of said county. In vacation.

GEORGE W. HALL ET AL., PLAINTIFFS,
vs.
EQUATOR MINING & SMELTING COMPANY, defendant.

At this day come the said defendant by its attorneys and files its bond and petition herein, praying a removal of this action to the circuit court of the United States in and for the district of Colorado in accordance with law.

Upon due consideration whereof, it is considered, that the said bond be, and the same hereby is, approved and filed in said action. It is further considered that the prayer of petitioner be granted and that this action be removed to the said circuit court of the United States for further proceedings. And it is ordered that the clerk of said district court transmit a certified copy of the record and proceedings in said action to the said circuit court of the United States, at Denver, without delay.

WM. E. BECK,
Judge of the 1st. Jud. Dist.

GOLDEN, COLORADO, *Nov. 19th*, 1878.

14 *Clerk's certificate.*

STATE OF COLORADO,
County of Clear Creek, ss:

First judicial district.

GEORGE W. HALL ET AL.
vs.
EQUATOR MINING & SMELTING COMPANY.

I, Horace H. Atkins, clerk of the district court of Clear Creek County, in the first judicial district of the State of Colorado, do hereby certify the foregoing copies to be true and perfect copies of all the original files, record, and proceedings in said cause in the said district court and now on file in my office*rs*.

Attest my hand and the seal of said court this 25th day of Nov., A. D. 1876.

[SEAL OF COURT.] (Signed) HORACE H. ATKINS, *Clerk.*

(Endorsed:) No. 201. Circuit court U. S. Hall et al. vs. Equator Co. Transcript from dis. court, Clear Creek Co. Filed Nov'r. 25th, 1878 Signed Edward F. Bishop, clerk. D'k't'd by R. S. Morrison, for plaintiff.

15 And afterwards, and on the same day, to wit, the 25th day of November, A. D. 1878, came the said plaintiffs, by R. S. Morrison, esq., their attorney, and filed in said circuit court and in said cause their amended complaint. And the said amended complaint is in words and figures as follows, to wit:

Amended complaint.

In the circuit court of the United States, district of Colorado.

UNITED STATES OF AMERICA,
State of Colorado, County of Clear Creek, ss:

GEORGE W. HALL & CHARLES H. MARSHALL
vs.
EQUATOR MINING & SMELTING COMPANY.

The plaintiffs complain and allege, for a second cause of action by leave of court first had and obtained:

1. That on the 15th day of June, A. D. 1878, they were seized in fee of that certain tract of land situate in Griffith mining district, county and State aforesaid, to wit, a certain vein running in and along and having its apex within the side lines of survey lot No. 261, Colorado Central lode mining claim, from a point on the south side line of said survey lot, 40 feet westerly from its east end line, and thence westerly 400 feet more or less along and within said survey lot.

16 2. That while the plaintiffs were so seized the defendant afterward, to wit, on the 21st day of August, A. D. 1878, entered into possession of the demanded premises, and now unlawfully withholds the possession from plaintiffs to their damage in the sum of thirty thousand dollars.

3. That the value of the rents, issues, profits, and mineral produce of said premises, as plaintiffs are informed & believe, from said 21st day of August, A. D. 1878, and while the plaintiffs have been excluded therefrom by the defendants, is thirty thousand dollars. Wherefore the plaintiffs pray judgment against the defendant:

1. For the recovery of the possession of the demanded premises.

2. For the sum of thirty thousand dollars the value of said rents, issues, profits, & mineral produce and for costs of suit.

(Signed) R. S. MORRISON,
Att'y for Plaintiff.

STATE OF COLORADO,
County of Clear Creek, ss:

George W. Hall, being duly sworn, saith that he is one of the plaintiffs in the foregoing action; that he has heard read the above complaint, and knows the contents thereof, and that the same is true of his own knowledge, except the matters and things therein stated on information and belief, and as to those he verily believes them to

17 be true; that he makes this verification on behalf of his coplaintiff as well as on his own behalf.

(Signed) G. W. HALL.

Sworn and subscribed to before me this 25th day of November, A. D. 1878.

[NOT. PUB. SEAL.] (Signed) CH. H. WENZELL,
Notary Public.

(Endorsed:) No. 201. G. W. Hall et al. vs. Equator Mining & Smelting Co. Complaint, amendment to, as directed by order in 199. Filed Nov'r 25, A. D. 1878, (signed) Edward F. Bishop, clerk. Morrison, att'y for pl'ffs.

And afterwards, and on, to wit, the 5th day of December, A. D. 1878, came the said defendant, by Willard Teller, esq., its attorney, and filed in said court and in said cause its answer to the complaint herein as amended.

And the said answer is in words and figures as follows, to wit:

Answer.

18 In circuit court of the United States, district of Colorado.

GEORGE W. HALL, CHARLES H. MARSHALL }
vs.
EQUATOR MINING & SMELTING COMPANY. }

And the said defendant, by H. M. & W. Teller, & G. B. Reed & Ed. O. Wolcott, its att'ys, answering the complaint as amended in this cause, says:

1st. It denies that it did on the 21st day of August, A. D. 1878, or at any other time, with force and arms, or in any way, enter upon the premises described in said complaint as survey lot No. 261, and denies that it ever took from said lot said sum of thirty thousand dollars or any sum whatever in silver-bearing ore, and denies that it took one hundred tons of ore or any number of tons whatever from said premises, and further denies that said property was in the possession of said plaintiff at time stated in said complaint.

2nd. It denies that the defendant ever blasted, dug into, or carried away any earth, ore, or substance of said mine described as survey No. 261, or lot No. 261, or sunk, drifted, or stoped out the substance
19 thereof, and denies that pl'ffs have ever been damaged in the sum of thirty thousand dollars in said premises by any acts of this defendant.

3d. It further denies that the said plaintiffs were on the 15th day of June, 1878, seized in fee of the vein running in and along and within the side lines of survey No. 261, from a point on the south side line of said survey 40 feet westerly from its east end line, and thence westerly 400 feet more or less, as alleged in said complaint, denies that said plaintiffs, on the 21st day of August, 1878, or at any other , entered into the possession thereof, or that it unlawfully withholds from the plaintiffs the possession thereof, and denies that the rents, issues, and profits of said premises from said 21st day of August, 1878, has been of the value of thirty thousand dollars as alleged in said complaint.

(Signed) H. M. & WILLARD TELLER,
G. B. REED,
ED. O. WOLCOTT,
Def'ts' Att'ys.

DISTRICT AND STATE OF COLORADO:

John Turch, being first duly sworn, says he is the duly authorized and appointed agent of the Equator Mining and Smelting Company, the defendant; that he has heard the foregoing answer of said defendant read and knows the contents thereof, and that the facts stated in said answer are true to the best of his knowledge, information, and belief.

(Signed) JOHN TURCK.

Subscribed and sworn to before me this 5th day of December, A. D. 1878.

[NOT. PUB. SEAL.] (Sig'd) JAMES M. LOMERY,
Notary Public.

(Endorsed:) 201. In circuit court. George W. Hall, Charles H. Marshall, vs. Equator Mining & Smelting Co. Answer. Filed Dec. 5, 1878. Signed, Edward F. Bishop, clerk; H. M. & Willard Teller, G. B. Reed, Ed. O. Wolcott, att'ys for def't, Denver, Colo.

And afterwards, and on, to wit, the 17th day of December, A. D. 1879, come the said parties hereto, by their attorneys respectively, and filed in said court and in said cause a certain stipulation for the trial of this cause.

And the said stipulation is in words and figures as follow, to wit:

Stipulation for trial by court.

In circuit court of the United States, district of Colorado.

GEORGE W. HALL, CHARLES H. MARSHALL }
vs.
EQUATOR MINING & SMELTING COMPANY. }

It is hereby stipulated that this cause may be tried before the judge of this court presiding, to wit, Hon. Moses Hallett, a jury being hereby waived.

(Signed) G. B. REED,
WILLARD TELLER,
Att'ys for Def't.

(Signed) GORSLINE & MORRISON,
BELFORD & REED,
Att'ys.

(Endorsed:) No. 201. Circuit court U. S. Geo. W. Hall et al. vs. Equator M. & S. Co. Stipulation for trial by the court. Filed Jan. 17th, 1879. Signed, Edward F. Bishop, clerk.

And afterwards, and on, to wit, the 17th day of January, A. D. 1879, the same being one of the regular juridical days of the December term, A. D. 1878, of said court—present, the honorable Moses Hallett, district judge—the following order was had entered of record in said court and in said cause, to wit:

Order: 1st trial commenced.

22 GEORGE W. HALL ET AL.
vs.
THE EQUATOR MINING AND SMELTING COMPANY. } 201. For possession of real property, &c.

At this day come the said plaintiff, by J. B. Belford, esq., R. S. Morrison, esq., W. R. Gorsline, esq., and Clinton Reed, esq., their attorneys, and the said defendants, by Willard Teller, esq., G. B. Reed, esq., and E. A. Wolcott, esq., its attorney, also comes.

And this cause now coming on to be tried by the court without a jury, in pursuance of a stipulation filed herein, the hearing of the evidence herein is continued to the hour of adjournment, when the further hearing herein is postponed and continued until to-morrow, Saturday, the 18th inst., at the hour of 9.30 o'clock, a. m.

And afterwards, and on, to wit, the 18th day of January, A. D. 1879, the same being one of the regular juridical days of the December term, A. D. 1878, of said court—present, the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Trial continued.

23 GEORGE W. HALL ET AL.
vs.
THE EQUATOR MINING AND SMELTING COMPANY. } 201. For possession of real property.

At this day come again the said parties by their attorneys respectively.

And thereupon, the hearing of the evidence herein is resumed and continued to the hour of adjournment, when the further hearing of the evidence herein is postponed to the incoming of the court on Monday next the 20th instant.

And afterwards, and on, to wit, the 20th day of January, A. D. 1879, the same being one of the regular juridical days of the December term, A. D. 1878, of said court—present, the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Trial continued.

GEORGE W. HALL ET AL.
vs.
THE EQUATOR MINING AND SMELTING COMPANY. } 201. For possession of real property.

At this day come again the said parties by their attorneys respectively.

And thereupon, the hearing of the evidence herein is resumed
24 and continued to the hour of adjournment, when the further hear-

ing of the evidence herein is postponed to the incoming of the court on to-morrow, Tuesday, the 21st instant.

And afterwards, and on, to wit, the 21st day of January, A. D. 1879, the same being one of the regular juridical days of the December term, A. D. 1878, of said court—present, the honorable Moses Hallett, district judge—the following additional order was had and *and* entered of record in said court and in said cause, to wit:

Order: Taken under advisement.

GEORGE W. HALL ET AL.
vs.
THE EQUATOR MINING AND SMELTING COMPANY.
} 201. For possession of real property.

At this day come again the said parties by their attorneys respectively.

And thereupon, the hearing of the evidence herein is resumed; and the court having heard the evidence produced herein as well by the said plaintiffs as on behalf of the said defendant, doth take the same under advisement.

And afterwards, and on, to wit, the 5th day of February, A. D.
25 1879, the same being one of the regular juridical days of the December term, A. D. 1878 of said court—present, the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Finding & judgment, first trial.

GEORGE W. HALL AND CHARLES H. MARshall
vs.
THE EQUATOR MINING AND SMELTING COMPANY.
} 201. For possession of real property.

At this day come again the said parties by their attorneys respectively.

And the court having heard the evidence produced herein as well by the said plaintiffs as on behalf of the said defendant, and the arguments of counsel, and taken the same under advisement, and being now sufficiently advised in the premises, doth find the issues herein joined for the said defendant and against the said plaintiffs';

Wherefore, it is considered that said defendant go hence hereof without day and have and recover its costs expended, to be taxed, and have execution therefor.

And afterwards, and on the same day, to wit, the 5th day of February, A. D. 1879, the same being one of the regular juridical days
26 of the December term, A. D. 1878, of said court—present, the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Judgment vacated & new trial.

GEORGE W. HALL AND CHARLES H. MARshall
vs.
THE EQUATOR MINING AND SMELTING COMpany.
} 201. For possession of real property.

At this day come the said plaintiffs, by J. B. Belford, esq., their attorney, and the said defendant, by G. B. Reed, esq., its attorney, also comes.

And it now appearing to the court that the costs of the said defendants to this day have been fully paid and discharged by the said plaintiffs; therefore, on motion of the said plaintiffs,

It is ordered, that the judgment of the court lately on this day had herein be vacated, set aside, and for naught held, and a new trial had herein in pursuance of the statute in such case made and provided.

And afterwards, and on the same day, to wit, the 5th day of February, A. D. 1879, the same being one of the regular juridical
27 days of the December term, A. D. 1878, of said court—present, the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Leave to file additional count to complaint.

GEORGE W. HALL AND CHARLES H. MARSHALL
vs.
THE EQUATOR MINING AND SMELTING COMpany.
} 201. For possession of real property, &c.

At this day come the said plaintiffs, by J. B. Belford, esq., their attorney, and the said defendant, by G. B. Reed, its attorney, also comes.

And thereupon, on their motion, it is ordered by the court, that the said plaintiffs have leave to file herein an additional count to their complaint.

And afterwards, and on the same day, to wit, the 5th day of February, A. D. 1879, came the plaintiffs, by R. S. Morrison, esq., their attorney, and filed in said court and said cause an additional count to their complaint herein.

And the said additional count is in words and figures as follows, to wit:

Additional count to complaint.

28 In the circuit court of the United States, district of Colorado.

STATE OF COLORADO,
Clear Creek County:

GEORGE W. HALL & CHARLES H. MARSHALL
vs.
EQUATOR MINING & SMELTING COMPANY.

And for another count to the plaintiffs' declaration, filed by leave of the court, the plaintiffs in this suit complain and allege:

1st. That they, the said plaintiffs, on the 15th day of June, 1878, were

seized in fee of certain premises situated in Clear Creek County, State of Colorado, and in Griffith mining district, described as follows, to wit: Fifteen hundred feet in length on the Colorado Central lode, together with twenty-five feet of surface ground on each side of the center of the vein for the entire length of fifteen hundred feet; and being so seized the defendant afterwards, to wit, on the 21st day of August, A. D. 1878, entered into possession of the demanded premises, and now unlawfully withholds the premises from plaintiffs to their damage in the sum of thirty thousand dollars.

29 2nd. That the value of the rents, issues, and profits and mineral produce of said premises, as plaintiffs are informed and believe, from said 21st day of August, 1878, and while the plaintiffs have been excluded therefrom by the defendant, is thirty thousand dollars.

Wherefore the plaintiffs pray judgment against the defendant—

1st. For recovery of the possession of the demanded premises.

2nd. For the sum of thirty thousand dollars, the value of said rents, issues, profits, and mineral produce, and for costs of suit.

(Signed) R. S. MORRISON,
W. R. GORSLINE,
BELFORD & REED,
Att'ys for Pl'ffs.

STATE OF COLORADO,
County of Arapahoe, ss:

George W. Hall, being duly sworn, saith that he is one of the plaintiffs in the foregoing action; that he has heard read the above complaint, and knows the contents thereof, and that the same is true of his own knowledge, except the matters and things therein stated on information and belief, and as to those he verily believes them to be true; that he makes this verification on behalf of his coplaintiff as well as on his own behalf.

(Signed) G. W. HALL.

Subscribed and sworn to before me this 4th day of February, A. D. 1879.

U. S. CIR. COURT SEAL. (Signed) EDWARD F. BISHOP, *Clerk*,
By F. W. TUPPER, *Deputy*.

30 (Endorsed:) No. 201. G. W. Hall et al. vs. Equator Mining and Smelting Co. Additional count to complaint (filed by leave). Filed Feb. 5, 1879. (Signed) Edward F. Bishop, clerk. Morrison, att'y for pl'ff.

And afterwards, and on, to wit, the 7th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Jury come, second trial.

GEORGE W. HALL ET AL. *vs.* THE EQUATOR MINING AND SMELTING COMPANY.	201. Second trial. For possession of specific real property and damages.

From dist. court, Clear Creek Co.

At this day come the said plaintiffs, by R. S. Morrison, esq., their attorney, and the said defendant, by G. B. Reed, esq., its attorney, also comes.

And thereupon comes a jury, to wit:

31 1. W. H. Pierce.	5. Chas. Levick.	9. D. N. Cassell.
2. Henry Foot.	6. F. A. Roberts.	10. P. M. Weston.
3. C. L. Hepburn.	7. Isaac Ware.	11. Chas. T. Snyder.
4. E. A. Farnum.	8. W. G. Winburn.	12. A. W. Kellogg.

good and lawful men, and they are duly selected and tried, impaneled, and sworn to well and truly try the matter at issue herein, and a true verdict render according to the evidence.

And thereupon comes the evidence, the hearing of which is continued to the hour of adjournment, when the further hearing herein is postponed until to-morrow *to-morrow*, Tuesday, the 8th instant, at the hour of 9 o'clock in the morning.

And the said jurors, being first each duly cautioned by the court not to converse among themselves or with others touching this cause or the matters at issue herein, nor the evidence heard, or any part thereof, nor to listen to such conversation of others, nor to read or hear read any publication touching the same, are permitted to separate to meet the court at its next incoming.

And afterwards, and on, to wit, the 8th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, as-
32 sociate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

GEORGE W. HALL ET AL. *vs.* THE EQUATOR MINING AND SMELTING COMPANY.	201. Second trial. For possession of specific real property and damages.

From district court, Clear Creek County.

At this day come again the said parties, by their attorneys respectively.

And the said jurors being now all here present and in the jury box, the hearing of the evidence herein is resumed and continued to the hour of adjournment, when the further hearing herein is postponed until to-morrow, Wednesday, the 9th instant, at the hour of 9 o'clock a. m.

And the said jurors, being each duly cautioned by the court not to converse among themselves, nor with others touching this cause or the

matters at issue herein, or the evidence heard, or any part thereof, nor to listen to such conversation of others, nor to read or hear read any publication touching the same, are permitted to separate to meet the court at its next incoming.

And afterwards, and on, to wit, the 9th day of July, A. D. 1879,
33 the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Trial continued.

GEORGE W. HALL ET AL. *vs.* THE EQUATOR MINING AND SMELTING COMPANY.	Second trial. For possession of specific real property and damages.

From dist. court, Clear Creek County.

At this day come again the said parties respectively.

And the said jurors being now all here present and in the jury box, the hearing of the evidence herein is resumed and continued to the hour of adjournment, when the further hearing herein is postponed until to-morrow, Thursday, the 10th instant, at the hour of 9 o'clock a. m.

And the said jurors being each duly cautioned by the court not to converse among themselves nor with others touching this cause, or the matters at issue herein, or the evidence heard, or any part thereof, nor to listen to such conversation of others, nor to read or hear
34 read any publication touching the same, are permitted to separate to meet the court at its next incoming.

And afterwards, and on, to wit, the 10th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record, to wit:

Order: Trial continued.

GEORGE W. HALL ET AL. *vs.* THE EQUATOR MINING AND SMELTING COMPANY.	201. Second trial. For possession of specific real property and damages.

From dist. court, Clear Creek County.

At this day come again the said parties by their attorneys respectively.

And the said jurors being each duly cautioned by the court not to converse among themselves nor with others touching this cause, or the the matters at issue herein, or the evidence heard, or any part thereof, nor to listen to such conversation of others, nor to read or hear read

any publication touching the same, are permitted to separate to meet the court at its next incoming.

35 And afterwards, and on, to wit, the 11th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—an order was had and entered of record in said court and in said cause in words and figures as follows, to wit:

Order: Verdict.

GEORGE W. HALL ET AL. *vs.* EQUATOR MINING AND SMELTING COMPANY.	201. Second trial. For possession of specific real property and for damages.

From district court, Clear Creek County.

At this day come again the said parties, by their attorneys respectively, and the said jurors being now all here present and in the jury-box, the trial herein is resumed.

And the said jurors having heard the evidence produced herein as well by the plaintiffs as by the said defendants, and the instructions of the court, retire to their room to consider of their verdict.

And afterwards, and on this same day come again the said
36 jurors, and on their oaths do say they find the issue in favor of the plaintiffs, and that the plaintiffs are the owners in fee of the premises described in the complaint, being fifteen hundred feet in length and fifty feet in width on the Colorado Central lode mining claim and all the valuable deposits within the lines of that location extended downwards vertically.

And afterwards, and on, to wit, the 15th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Judgment ordered entered.

GEORGE W. HALL AND CHARLES H. MARSHALL *vs.* THE EQUATOR MINING AND SMELTING COMPANY.	201. For possession of specific real property and for damages.

From district court, Clear Creek County.

At this day come the said plaintiffs, by Hugh Butler, esq., their attorney; and the said defendant by H. M. Teller, esq., i's attorney, also comes.

37 And thereupon the said plaintiffs move the court for judgment upon the verdict of the jury herein.

Wherefore it is ordered by the court that judgment be entered herein for the said plaintiffs and against the said defendant.

And thereupon and upon the same day judgment was entered upon the judgment-book of said court, as by the statute in such case made and provided; and said judgment is in words and figures as follows, to wit:

Judgment.

GEORGE W. HALL AND CHARLES H. MARshall *vs.* THE EQUATOR MINING AND SMELTING COMpany.	201. Second trial. For possession of specific real property.

From district court, Clear Creek County.

On this 15th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court, there being present the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge:

It is considered by the court that the said plaintiffs do have and recover of and from the said defendant possession of the premises
38 in the complaint as amended February 5th, A. D. 1879, mentioned, to wit, fifteen hundred (1,500) feet in length on the Colorado Central lode, survey lot No. 261, situate in Griffith mining district, Clear Creek County, State of Colorado, together with twenty-five feet of surface ground on each side of the vein for the entire length of fifteen hundred feet, and that they have a writ of possession therefor.

It is farther considered by the court that the said plaintiffs do have and recover of and from said defendant their costs by them in this behalf laid out and expended or to be laid out and expended, to be taxed and have execution therefor.

And afterwards, and on, to wit, the 16th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the Samuel F. Miller, associate justice of the Supreme Court of the United States, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Motion for new trial granted.

GEORGE W. HALL ET AL. *vs.* THE EQUATOR MINING AND SMELTING COMpany.	201. For possession of specific real property.

From district court, Clear Creek County.

39 At this day comes the said defendant, by H. M. Teller, esq., its attorney, and moves the court for leave to withdraw permanently from the files herein its motion for a new trial of the issues herein joined.

And the court being now sufficiently advised in the premises, and for good and sufficient reasons to the court appearing, it is ordered by the court that the said motion be granted.

And afterwards, and on the same day, to wit, the 16th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, the following additional order was had and entered of record in said court and in said cause, to wit:

Order: Third trial denied, & division of opinion.

GEORGE W. HALL ET AL.
vs.
THE EQUATOR MINING AND SMELTING COMPANY. } 201. For possession of specific real property.

From district court, Clear Creek County.

At this day come the said plaintiffs, by J. B. Belford, esq., their attorney, and the said defendant, by H. M. Teller, esq., also comes.

40 And the said defendant having heretofore demanded a third trial herein under the statute in such case made and provided, and the said demand having been taken under advisement by the court, and the court being now sufficiently advised in the premises the judges are divided in opinion upon such motion.

And, thereupon, it is ordered by the court that the said motion be denied, and on motion of the said defendant it is further ordered that the said division of opinion be certified to the Supreme Court of the United States *in* accordingly done.

And the said certificate of division of opinion is in words and figures as follows, to wit:

Certificate of division of opinion.

STATE OF COLORADO,
County of Arapahoe:

GEORGE W. HALL AND CHARLES H. MARshall
vs.
THE EQUATOR MINING AND SMELTING COMpany. }

In the circuit court of the United States, district of Colorado.

This was an action for the recovery of the possession and determination of the title of certain real estate, to wit, fifteen hundred feet in length by fifty feet in width, on the Colorado Central lode.

41 At December term, 1878, of said court, the case was submitted by agreement of parties for trial by the judge of this court, and on such trial a judgment was rendered by the court in favor of the defendant and against the plaintiffs. And thereupon, the plaintiffs paid the costs of such suit, and moved the court to vacate said judgment

and grant a new trial without showing cause, under the provision of section 254 of the code of civil procedure of Colorado. That motion was granted, and a new trial awarded the plaintiffs without error being alleged.

And at the May term, 1879, the cause coming on to be heard, was submitted to a jury for trial. The verdict was for the plaintiffs. And afterwards, to wit, on the 15th day of July, 1879, a judgment was rendered on said verdict in favor of the plaintiffs. And after the rendition thereof, and on the same day, the defendant having paid all costs recovered by said judgment, by H. M. and W. Teller, and G. B. Reed, its attorneys, moved the court to vacate said judgment and grant a new trial to the defendant, under the provisions of said section 254 of the code of civil procedure of Colorado.

And thereupon it occurred as a question, "Whether the defendant, having paid all costs recovered by said judgment, it is entitled to
42 have said judgment vacated and a new trial in said cause under the provisions of section 254 of the code of civil procedure of Colorado, without showing cause?"

On which question the opinions of the judges were opposed, and thereupon the said motion was by the court denied.

Wherefore, on motion of the defendant, by its attorneys, H. M. and W. Teller, and G. B. Reed, that the point on which the disagreement hath happened may, during the term, be stated under the direction of the judges and certified under the seal of this court, to the Supreme Court to be finally decided:

It is ordered, that the foregoing question, on which the disagreement of opinion hath happened, which is made under the direction of the judges, be certified according to the request of the defendant, by its attorneys, and the law in the case made and provided.

(Signed) SAM. F. MILLER.
(Signed) MOSES HALLETT.

And afterwards, and on the same day, to wit, the 16th day of July, A. D. 1879, the same being one of the regular juridical days of the May term, A. D. 1879, of the said court—present, the honorable Samuel F. Miller, associate justice of the Supreme Court of the United States, assigned to the eighth judicial circuit, and the honorable Moses Hallett, district judge—the following additional order was had and entered of record, to wit:

Order: Bill of exceptions to be filed. Execution stayed.

43 GEORGE W. HALL ET AL.
vs.
THE EQUATOR MINING AND SMELTING COMPANY. } 201. For possession of specific real property, &c.

From district court, Clear Creek County.

At this day come the said plaintiffs, by J. B. Belford, esq., their attorney, and the said defendant, by H. M. Teller, esq., its attorney, also comes:

And thereupon, on motion of the said defendants, it is ordered that the said defendants file herein its bill of the exceptions reserved by it upon the last trial of the issues herein joined, within ninety (90) days from this day.

It is further ordered by the court, on motion of the said defendant, that execution be stayed herein for thirty days from this day, and that the said defendant file herein its supersedeas bond herein, in the sum of ten thousand dollars ($10,000.00).

And afterwards, and on, to wit, the 29th day of October, A. D. 1879, came again the said defendant, by Henry M. Teller, esq., its attorney, and filed in said court and in said cause, its bill of the exceptions, reserved by it upon the second trial of the issues herein joined; and the said bill of exceptions is in words and figures as follows, to wit:

In the United States circuit court, eighth judicial circuit, district of Colorado.

GEORGE W. HALL AND JAMES H. MARSHALL
vs.
EQUATOR MINING AND SMELTING COMPANY.

Bill of exceptions.

Be it remembered that on the trial of this cause at the term A. D. 1879, of the circuit court of the United States in and for the district of Colorado, the plaintiffs, to maintain the issue on their part, gave in evidence to the jury, the evidence of the witness WILLIAM P. LINN, who, being duly sworn, testified as follows, to wit:

My business is that of a miner. I commenced in September, 1849, and it has been my principal business ever since. I commenced in placer mining and since have been engaged mostly in lode mining; have worked in the mines myself. I call myself a prospector. I have not done much of the hard work of the thing, only to manage other men; I commenced prospecting at Talma, California, from there to Mariposa County, Talaro, and from there to Nevada. I commenced in Colorado in 1865; been mining ever since then. I am the discoverer of the Colorado Central lode, on Leavenworth mountain, Griffith mining district, Georgetown, Clear Creek County. I was a little over four months engaged in search for it. I and others had been a
45 year trying to find where this large amount of float came from.

Question. State to the jury how you came to discover the lo*ad*, and all about the float, and the means you took to find out where it came from.

(Which was objected to by the defendant, on the ground that it was immaterial.

And the court overruled said objection, to which the defendant then and there duly excepted.)

Answer. It was something different from what I had seen in prospecting before. I had often seen gold float and native silver on the side of the mountain. Here was float ore found that paid well for working it, and it was an enigma to us. This led me to believe there was a rich vein that had not been discovered, and I went to work to find that, and by the labour of other men that showed me where it was, I determined where it was and located it. I sank 70 feet through sand and boulders, other men's work having shown me that it was neither above nor below, but there was a deep channel in which it was. In the tunnel I found ore worth 600 ounces to the ton, some places four or five feet, and some places about two feet; that was before I discovered the vein. As near as I can learn, we took

out $150,000 worth of the float ore down the mountain side. It was supposed first to have come from the Equator Mine, but it was traced up until we found it was above the Equator Mine, and then we concluded it was a mine undiscovered, and that was the mine I sunk for. I suppose it was about 150 feet above the Equator Mine; I never measured it. When I sank this 7000 ft.
46 shaft I struck the top of this vein matter, and there was ore varying from perhaps four inches to perhaps two feet in width. There was bed rock on each side. What we as miners call bed rock is the country rock outside of the vein matter. This came to the top on both sides, and I had sunk 70 feet through these boulders, believing that the vein was at the bottom of this creek bed, all this float ore having been found in boulder form, washed, rounded, and no one had found the bottom of this channel. The first shaft I sank I called it the McCoy shaft; had no particular reason for so calling it, because I knew it was on the Marshall Tunnel Company's ground. That is the shaft (indicating on plat). I knew it was no discovery. I could not make a discovery inside of another man's ground. Then I proceeded to sink another shaft after finding where the vein was, and called it the Colorado Central discovery shaft. This shaft was 40 feet deep through the tumble stuff on the mountain, where we struck the crevice, if I remember right. The first one was about 30 feet, the Square and Compass, the angular stuff of the common tumble on the mountain, and about 40 feet through this wash before we got into the top of the vein, but it was somewhere about that depth. The discovery in the discovery shaft of the Colorado Central was somewhere about 40 feet. This shaft, while in my possession, I sunk up to 150 feet from the top. The first forty feet was to the top of the vein. There was no perceptible dip in either of these shafts that I noticed particularly. I took the
47 vein to be about vertical. I had what is called the Shea shaft sunk 150 feet west of that. The discovery shaft was about 200 feet west of the McCoy shaft. The Shea shaft, if I remember right, I have called it 170 feet; don't know that I have ever measured it. Then about 250 feet to the southwest of there is what is called the Reed shaft. I did not sink any other at that time. I took these shafts to be the line of the lode, and made my survey, my record and map, locations for patent, supposing these shafts to be the line of the lode. Afterwards I made a discovery away across the creek; it was running on the line of the lode. This survey was made on the line of south 42° west, if I remember right, and did when I made a discovery over there, and then I went and run a line back, and in order to prove I was on the same vein; and I wanted to do that to help out the credit of my new discovery. I run back, and on that line. I sunk a shaft, which is now known as the Harris shaft. That is the shaft (indicating on map). I sunk on that to find the vein again; I sank somewhere about 30 feet through the gravel. I never measured it; can't say how deep I cut into the vein—never measured it. I only have that from the men that worked for me. I can't swear to the depth, only that I know that I located it on this line, running back from this other, and took the lever that works the break on the Colorado Central as my target in running back, so that I knew that I was on the exact line. I sank this shaft about 1,200 feet west of the Colorado Central, where I considered I had a lode vein, and I sank the Harris shaft there. The Reed shaft was sunk to a depth of
48 88 feet, when they struck the top of the vein; so I was told by one George Reed, now dead, who was working for me, 88 feet through the slide. I there saw we had what was similar to the other ore

in the Colorado Central, coming out of that shaft. I was there looking after it, and they showed me this ore and this work; that looked to be the same as the Colorado Central, and they were hoisting it out of this shaft; that is all I know about it. I never was in the shaft; I never was down. I took a direct line from the McCoy shaft to the discovery of the Colorado Central, and I believed it to be a vertical vein from what I had seen. I took a straight line, and sunk on that, and found the Shea shaft, and then I took a straight line down the same way on the Reed shaft. I am not posted in the classic names of rocks, although I know of no man who has seen so much of new discoveries as I have, and different places, and yet I don't know how they classify these rocks. It was a rock that bears silver, zinc, and lead; I found that character of rock; I found it vertical, and a vein varying from 40 to 70 feet in width; usually there was lead and zinc in this ore, sometimes rich in silver, assays as high as $29,000 to the ton; again, ore that looked well to the ordinary prospector that would not go $5.00 to the ton. As a general thing the ore was vertical standing with the position of the vein, but not always. There was places where the ore would pitch off, seeming to take the one side of the vein or the other, almost flat; other places it would occur in bunches, but the vein matter, and what we as miners call a lode is not the shape of the ore at all; the ore has nothing
49 to do with that, we claim the lode to be in the shape of what the gangue is.

(The last statements of the witness were objected to, because not proper; which objection was overruled by the court, and the defendant then and there duly excepted.)

Witness continued: We claim the vein, what we call the lode, to be the shape of the vein matter and the walls. The ore occurs in bunches.

(Defendant objected to his stating what he calls anything; facts wanted; which objection was overruled by the court, and the defendant then and there duly excepted.)

WITNESS. According to my experience for the last 30 years, we find bunches of ore; we find ores in different shapes; but what we, as miners call a lode, is the shape of the walls and gangue rock. In this we find the ore dipping from the one side to the other. He asked me about the ore. I say I cannot explain that, because there is no definite way of doing that. There were drifts run by myself and the lessees from me, drift connected with the Marshall tunnel; connecting from there to the extent of 5 or 600 feet, I think. The drifting was done while I remained the owner of the lode. That drifting showed the continuous vein matter, and sufficient to induce the vein to work—whether it paid them, or not, I don't know. I cannot say what amount of ore was taken out of the lode while I was owner; I never tried to estimate how much; never thought of it; I have no doubt there was over a hundred thousand dollars. I am acquainted with the Equator lode; it was a known lode be-
50 fore the Colorado Central lode was discovered, and when I discovered the Colorado Central I found it runs in a different course from the Equator, and by tracing I was satisfied that I had a different lode. The Equator came in at a sharp angle, and according to all our rules as miners, the lode that kept its direct course was the lode, and anything that came in at a sharp angle ended where it came in on the angle. When the Equator struck the Colorado Central it came there just so (indicating), I am supposing it in that way. I merely said if it is not known to go beyond that, there it ends; but I do not know anything about that. It was not my business. The Saco lode and Hidden Treasure ran into the Colorado Central lode; I am only supposing it;

it don't amount to anything; the course of them would run into the Colorado Central; don't know whether they ever crossed or run through it; I think from my knowledge, that the drifts are as much as between 7 and 800 feet, a direct line of shafts perfectly straight line would include about 12 to 1,300 feet. Now these are not connected further than between 7 and 800 feet, but being in a direct line, and the same character, I take it—I have taken it for granted—that has been my opinion—that don't prove nothing that it was—that the whole thing was the same vein, between 13 and 14 hundred feet; but I know of it being connected, and I have followed it myself and seen the mineral for between 7 and 800 feet on a straight line; I mean that this is on a straight line west from the shaft horizontal measurement; westward from the shaft I first mentioned. (Witness to Justice Miller.) As you have not been a miner, if you will allow me, I will tell you how we
51 often judge of these things: if the lode has got a dip or pitch and really goes over on uneven ground, we make calculations for that, but this being a vertical vein, I found it on astraight line.

On cross-examination witness William P. Linn testified as follows, to wit:

I believe you know that I am an old prospector. It would be very hard for me to tell what work I have done in this country. It was my business, however, to prospect. I believe I came in in 1864. I believe I quit carrying the pick and shovel in November, 1872. In the meantime I worked hard. After that I worked by managing other men's labour, but up to that time I carried the pick and shovel myself, during which time I worked most of the time; have not used the pick and shovel myself, since that time. Since 1872 if I have prospected it was very little. After the discovery of this lode I can't say that I spent much time underground, only passing backwards and forwards. I went in and looked after it. I was a man in the shaft four months, Sundays not excepted—the McCoy shaft. I was through the mine frequently. As to handling the pick and shovel, I did not do it when I had money enough to get along without it. I may have spent days and weeks in the mine, but I was only passing, that is all; I did not pretend to use to pick and shovel afterwards. At the time I entered upon the land to make the discovery, I knew it was on the land of the Marshall Tunnel Company. I talked with General Marshall, and agreed with him that I should have a lease. I knew that I could not make a discovery there; my object in going there was to find the course of the vein of the Colorado Central
52 lode; there was no Colorado Central lode at that time, but there was a vein known to exist. There was $150,000 taken out of that tumble stuff, and I was one of the parties trying to find the vein. That tumble-stuff was first supposed to come from the Equator lode, but after passing the line of the Equator we still found this ore, still above, and we thought there was another vein, and I sank this McCoy shaft in order to discover the course of the thing, so that we could go beyond the Marshall tunnel grounds and make a discovery. There was a cross-cut from the Square and Compass coming to the surface; there was a cross-cut over 40 feet, which they had followed down, and showing it in place, and at 40 feet deep they cross-cutted into the mountain and found the creek-wash. Well, now, that creek-wash and boulders, forming this deposit of float-ore, and all this wash down the mountain side there went to show that there was a creek-channel, and this ore had come out of the creek-channel, and I sunk to find that

lode. I sank that shaft to discover where the vein run, so that I would be enabled to go beyond and make a discovery. This gave me the course, the direction, how to find the property beyond. I sank the McCoy shaft first. This shaft was 3 by 5 inside of the timbers. I sank it 70 feet before striking anything. I struck ore and the top of the vein with the common gangue matter, and that a miner knows has rich ore in it. I sunk it perpendicularly. I knew I had a lode at that point after I got down. A little over 300 feet from there was a lode discovered in what is called the Robinson tunnel, that I believed to be the same lode, and I took it for granted that it was the same lode,
53 and that a straight line would strike it. They located, these parties, and they sunk; and I told them while I sunk 70 feet, they would only sink 40 feet, and they wanted to know what I claimed, which, according to my entries, is about 1,500 feet in the end, and I am putting some up the channel. I went up on the Shea shaft and Reed shaft, and put them all on a straight line, and they all struck it. I took it for granted that was a straight vein—it was a true fissure vein, and then located in a straight line, proving it; proved it to be so, of course. I did not know before I sunk them. The lode was struck by the bore of the Marshall tunnel at a depth of 400 feet under ground. I sank the shaft about 100 feet west of that—the McCoy shaft. There was no connection through these two points at that time. I understand there has been since. I did not say the Marshall tunnel struck this vein. I said the Robinson tunnel, and I took it for granted that that was the same that was in the Robinson tunnel. After sinking the McCoy shaft, I then had the shaft sunk that is known since as the discovery of the Colorado Central. It was on the Marshall tunnel property. I simply recorded that to prevent the discovery of other people. I knew I had no right there, and I called it the McCoy shaft and recorded it as the discovery, knowing at the same time that I had no discovery, and then located this other, and immediately after it the others. From this shaft to what is called the discovery shaft, it is about 200 feet. I did not know it was the same vein only as prospectors know things. We had good reason to believe it was. The
54 next shaft west of discovery that I sunk was called the Shea shaft. This was sunk some two or three weeks after the discovery shaft—may be more. That was sunk 24 feet to the top of the vein. The next shaft sunk was put 250 feet from there, called the Reed shaft. After these had been sunk I went over the creek and made a discovery, and then drew a line to prove it was the same vein; sighted back, had the surveyors sight his compass, and took the lever that worked the brake on the Colorado Central as his target, and in a direct line is what is called the Harris shaft. I can't say how far the Shea shaft is from the Harris shaft. I never measured it; perhaps 700 feet; can't say how far it is from the shaft I sunk on the west side of the creek to the Harris shaft. I would have to guess at that, as 13 or 1,400 feet, called it, on the Treasure lode. I believed it to be the same lode in my discovery. This shaft across the creek is connected only by direct line and by the surveyor supposing it to be the same vein. They have never been connected by underground developement. The McCoy shaft has been connected with the lode found in the Robinson tunnel at a distance of about 340 feet from the Robinson tunnel, what is called 'the McCoy shaft, near the Robinson tunnel. From the McCoy shaft to the lode in Robinson tunnel, as near as I know it, is about 340 feet. I think the connection was made during the year 1873. The *the* McCoy shaft was connected with the Colorado Central lode in the

year 1873, if I remember right. I was never down in the Reed shaft, but from information from the men who worked in it, I under-
55 stood it to be 88 feet. I never was in it. We struck a wall in the Colorado Central, on the north side. I struck what other people—what I would call the lode, but other people differed, for the reason it was not so solid; but on the north side there could be no mistake. It was a hard blue-gray granite. It was about 150 to 160 feet west of discovery. I would judge it to be from 40 to 50 feet north of the line of shafts. The only guide I had to the south wall was going down into a shaft sunk by Mr. John Turck on the Equator, finding what I called their north wall—a hard, slick*n*sides wall. He had a drift driven from there into the Colorado Central. I went in and examined that and I asked my men to examine it, and to be sure that they did not report on anything that they could not swear to. We found a hard, slick*n*sides wall on the north side of the Equator shaft, what they call the west shaft, and found 20 feet of this hard, slick*n*sides ground. I have found walls in this mine at other places. I think about 150 or 160 feet west of there, I found a hard and as perfect a wall on the north side as I ever saw in any mine. I can't give the dates, but this was some 3 or 4 years ago. Mr. Weaver, the superintendent of the mine, also saw it. It differed from the vein-matter in being of this hard granite nature and perfectly apart, similar, as we miners understand, by the part between the vein slick*n*sides. I never pretended to know how wide it was. I pretended to know where it was. There was one wall on the north side of the Colorado Central, and the other was on the north side of the Equator. I never measured the distance. From the line of that lode south from what
56 I thought was the wall of the Equator shaft, was the distance at right angles, from the course of my line, as I told you, about 70 or 80 feet—a little more than that—may be 100 feet; am only guessing. I knew of the existence of the Equator lode when I went prospecting in 1872. I discovered there, and the Equator lode was discovered in 1866—4 years before. The Equator was discovered four years before the Colorado Central. I saw the notice shortly after I discovered. It is more than four years from 1866 to 1872. The Colorado Central lode was run both ways from the Discovery; I think 400 feet; about that; I said 700 feet in all. It was 200 feet from the discovery to the McCoy shaft, and, as they told me, about 200 feet from there to the Marshall tunnel line. It was 240 feet more to the Robinson tunnel, which was beyond the Marshall tunnel. I never measured any of these distances.

On redirect examination W. P. Linn testified as follows, to wit:

In the McCoy shaft I discovered what I believed to be the south wall between, being the wall between that and the Square and Compass or Equator. In the Colorado Central I never went to the south wall. I have been into the Marshall tunnel. I know what sort of material there is between the Equator and the Colorado Central. It was the common country rock of Leavenworth mountain. I did not know what to call that rock until I asked some scientific men. They called it granite. It is a white, I would call it fel'spar, but the scientific men call it granite, and where it is decomposed I have seen thousands of dollars spent by prospectors in following it as the flow of
57 the lode, because they did not know any better. It, when decomposed, looked like vein matter. It is country rock of Leavenworth mountain, and is the same that is common on that mountain. It is three or four hundred feet in thickness. It is not the same as the

material on the north side. In the McCoy shaft I found a south wall. It was this white spar called granite, country rock. It is not vein matter.

The plaintiffs to further maintain the issues in their behalf, here introduced the witness DANIEL ROBERTS, who being duly sworn, testified as follows, to wit:

I have been a miner about 20 years, in England and in this country. I have mined in Clear Creek County about 12 years. I have been foreman of mines about 7 years. I was one of the court examiners on the two examinations that were made. I went through the workings of both sides in this case. I was at the bottom of the Colorado Central lode, discovery shaft, at this time. Beginning there I have a lode, but not quite at the bottom. The lode is a little bit narrow—I am speaking of the Colorado Central, of the lode and vein matter. At the foot of the discovery shaft of the Colorado Central there is crevice material. I went from the discovery shaft to the Marshall tunnel. I did this by going west, and then down the Marshall tunnel level. I went from the Marshall tunnel up to the McCoy shaft and up through the Marshall tunnel, up to the surface through the McCoy shaft. I found a lode between the Marshall tunnel and the McCoy shaft. I found everything
58 logged over. I went one time when they were raising up from the Marshall tunnel before that; where they were raising there was mineral there. I did not pay much attention to tracing the mineral. I found a crevice all the way through. I saw mineral in places, as I stated. I saw mineral in the raise, some time before when they were working on it. They covered it over so you cannot see the mineral unless you took particular pains to search for it. Between these two points the *lode* is driven on the lode (witness goes to map) right up this raise (indicating); there is a raise from the Marshall tunnel going up there onto the drift to the west through another little shaft until you come to the bottom of the McCoy shaft, and from there I went to the surface. This is the raise from the Marshall tunnel I believe (indicating). I don't know what the distance is in the elevation between the top of the McCoy shaft and the Marshall tunnel. In round numbers it must be 3 or 400 feet. I don't know how deep the McCoy shaft is. From the Marshall tunnel starting west, we found on the Marshall tunnel level cross-cuts. The 380-foot level of the Colorado Central is driven on the lode. That is the first cross-cut going south (indicating on map); this is driven through crevice matter. Now that cross-cut connects the Marshall tunnel level on the Colorado Central, and the Marshall tunnel on the Equator. I mean two levels running from the Marshall tunnel. They run out from the Marshall tunnel, and are called the Marshall tunnel levels. At the cross-cut between the
59 Equator 360-foot level and the Marshall tunnel level I found crevice material. From the Marshall tunnel to the next connection west that is made with the Equator 360-foot level is at what you call the manhole. We find crevice material there. The next connection west between these two levels is another cross-cut west of the Gates shaft; there is a cross-cut connected through. The 360-foot level (indicating on map) lays disconnected with any workings above or below the first cross-cut, as you go west. That is what they call the (indicating) No. 5 level or Marshall tunnel level on the Colorado Central lode. This is (indicating) what they call the 360-foot level on the Equator. These two levels come together there (indicating on map). They are connected by cross-cuts there (indicating) and a cross-cut here (in-

dicating) west of the Gates shaft. I believe they are connected there (indicating). These cross-cuts are somewhat stopped. I was through them last winter some time. These two veins come together here (indicating). This is the 360-foot level I don't know anything about the vein. The wall of this lode comes straight in here in this drift, and continues the same course as what this is driven. I do not say that they cross each other. There is a connection between them in *in* these two places; right here (indicating). The Colorado Central is called north. The veins are separate at the Marshall tunnel. They come together there (indicating on map). The lower red drift was run by the Equator Company all the way. The upper one was run by the Colorado Central. The Equator have a vein all the way
60 in this drift. The Colorado Central has no vein in its drift at this end. Between the east cross-cut and west cross-cut it is all crevice matter. It is certainly one lode, except one place is a little horse of ground stands a little west of the manhole. I don't think there is much stoping done in the Colorado Central lode between the Marshall tunnel and the manhole, only where it has been stoped for mineral in the different places in the drift. Between or in the Equator 360-foot level, between Marshall tunnel and the manhole, we find just the same. There is some barren ground there east of the manhole. There is 125 or 126 feet of barren ground. There is no mineral to speak of. There might be a speck. It is mostly barren ground after the Equator 360-foot level reaches the manhole. From there going west there is some mineral in the back of the stope. There is a mode by which that vein has been traced from the Marshall tunnel to the surface. West of the Marshall tunnel there is the Gates shaft. This is what they call the Marshall tunnel (indicating). That is what is called the Gates shaft (indicating). Beginning at the Marshall tunnel and going up that is 40 feet up to what is call the Gates shaft, back of the Wallace stope. Then they have a large streak of mineral about 10 feet south of the shaft. From there I have traced it up the winze until we get up to what is called the Gressengen level. That stops and goes into branches. On the Gessenger level we find it again about 10 feet south of the Gates shaft. That would be at the Gates level. The same streak proves about 10 feet south. It is
61 26 feet above the Gates level, and also up to the west shaft. That is called the west shaft. It is here (indicating). From the Gressenger level up to the Gates we trace it up there from the Gates up to this level. We had to climb through a small space, and we could not see this same 10-foot streak over to the south, and the same up to the bottom of the west shaft. In the 120-foot level, from the west shaft to the Gates shaft we found a shaft sunk at the south side of the level—driven there about ten feet on the south side; driven on the lode. There is some mineral there. We traced the mineral up on top of the west shaft; that is, we did not trace that same streak. We go through that shaft and saw what we supposed to be the same streak south of the Gates shaft about 10 feet. In the Thompson tunnel level we find this material. We traced that nearly to the bottom of the discovery shaft; about nine feet north of the bottom of the discovery shaft. These developements show it has always been driven on what is called the Colorado Central lode. I think it is one continuous lode. I think the top or apex is somewhere up in this discovery shaft. That is the drift to the north. The level above that—I was in that—it appears to be a little north of the shaft. It looks very much vertical. This is the bottom of the level (indicating on map), and that is the bottom of the

Gates shaft. The map shows it—the top—to be about the same point. Going back east to come out at the discovery shaft, we follow these different levels until we get up here at the Thompson tunnel level—this little mark—and you find that you trace that ore, that is, to
62 the point north of the discovery shaft. The point where you find the ore-vein nearest to the discovery shaft is near the discovery, a little north somewhere. The place where the Thompson drift is so wide is on account of its being soft. I think there are two streaks there. There appears to be a streak on each side and one on this level. Down at that level there is an ore-streak there in that shaft and on back (indicating on map) here. Here is one, and there is the other, side-line of the Colorado Central lode. The apex must be inside of these two lines somewhere. All these workings beginning with the red color—the one below, up to the top of the whim shaft—I believe are within the side-lines of the Colorado Central patent. The Colorado Central lode and the Equator lode diverge, going east, from the Marshall tunnel. I think we measured last winter and found them some 80 feet apart in the Marshall tunnel (points)—that big tunnel—that place is the 80 feet between the two lodes. The Square and Compass lode is about 80 feet away from here. In the Kirtley tunnel I measured it last winter. I think it was about 200 feet. In the Kirtly tunnel, for the 200 feet or 180 feet, we find country rock between the two lodes, and here (indicating) we did not examine it much. Last winter we had the exact number of feet. Of the 180 feet between the two lodes, I don't know how much of it is country rock. Of the 80 feet between the Equator and Compass & Square, I think it all was. I think in the Kirtly tunnel we found the north wall of the Colorado Central. There is a wall there. It is a belt of porphyry rock, which I think makes the north wall of the
63 lode. I think there at the Thompson tunnel, at the bottom of the discovery shaft—I think you find the north wall at that point. Then there is a point 20 feet up in the discovery shaft where we find it. I don't remember how many feet. I was up there last winter. The north wall shows there. The Colorado Central lode is the largest lode. On the Equator they have driven their drifts all the way through the 360-foot level, and some places a little wider. The Colorado Central lode is a good deal wider. There is one particular drift that shows all the ore-veins in the lode. The Gates level does. The south end of that cross-cut runs into a stope worked by the Equator. Between the Equator stope and the north wall of the Colorado Central that cross-cut is driven, I think, somewhere between 40 and 50 feet. From the first one going south it is about 10 feet. This one would be next. It is about 28 feet in there. There is three ore-streaks there, and this stope makes another one, and the Equator stope would make the fourth. We can't see that stope. The ground has been filled up. The Colorado Central, as we go west, are all one lode west of the Gates shaft, I think, from the first manhole, the first cross-cut east. The Equator and Colorado Central diverges going east. The Colorado Central is the stronger vein. As you go west from the Marshall tunnel, where you find the two lodes together, the Colorado Central lode keeps the streak. The Equator does not cross the Colorado Central that I know of. I could not find any indications of its crossing the Equator. After it has united with the Colorado Central, for the first two or three hundred feet after the first cross-cut west
64 to the second and third cross-cut, the Equator probably will follow the vein—the same vein. It is not one vein from the extreme end of one cross-cut to the end of the other cross-cut. Here is the

cross-cut, there. That is the cross-cut driven by the Equator Company 49 feet. It is one vein.

On cross-examination Daniel Roberts testified to the jury as follows, to wit:

In speaking of the Colorado Central lode and the Equator lode I mean what is called the Colorado Central and what is called the Equator. The surface lines defines the boundaries of a lode. The crevice defines the lode. We never found two sets of walls in that lode. I said there were two lodes east of the Marshall tunnel. I was asked which was the larger lode at this point. I said it was between that, from here to here (indicating on map). I did say that the larger lode is there than what this is—this is crevice matter and lode matter between. Here to the west all crevice material; from here right to this point (indicating on map) is all crevice material. The Equator and Colorado Central lode is the Colorado Central because they followed their lode here and followed from there to there (indicating on map). There was a wall followed from this point down to there. I saw the wall along there myself. I saw it back of the mineral going into the mountain. I saw it for quite a distance. I don't remember the distance. There is a horse of ground west of the manhole and the wall comes in here. It is a good-looking wall. I do not know what it is composed of. There is perhaps some crevice matter there. The
65 levels at that point (indicating) break into each other there on the sides of the levels. They are 5 or 6 feet apart. They followed a wall there; come here and broke right into the Equator drift. I don't think they broke through that wall to break into the Equator. That drift was following the wall. You ask me how far it was through that drift. They were following the wall. They kept on with their drift. From the center of that drift was some distance apart (indicating). They followed the wall and broke through there; and the center of their drift, I said before, was five or six feet from the center. The character of this vein was crevice material. I call crevice material a soft streak—mineral streak. There was not much mineral for one hundred feet in this cross-cut. There was some mineral. There is a streak there, continuous, running from this point down here. It varied all the way from ¼ inch to 2 inches. There was no set-off there at all. That wall comes straight—the same course as it does here. There was no vein mineral there. Don't know how far back I discovered any. I don't think there was any for 25 feet easterly from that point. All I can say about what broke through into the Equator vein, what it was that broke through, and what it was that went through is that they followed a vein or crevice right through; but there was no mineral, I think. I testify all these cross-cuts as though crevice material. They followed a crevice in there and broke through. This was the main crevice. There is a drift between the two. They had a crevice—ore-streak. In these ore-streaks in these cross-cuts was really crevice material, but there was no mineral streaks. They fol-
66 lowed their lode right along through until it came right into the Equator. There was a wall they followed in there. I say about this far (indicating). It is crevice material between the two. I said on direct examination it was all one lode up here. Here there is a cross-cut there driven by the Equator Company. Up to this far (indicating) it is all the same lode. I found the horse right here. Don't know what the length of it is, because this cross-cut opens up material again. It must lay up somewhere in there. The material in the two

drifts united when they broke through into the Equator. They followed back to this point out here, where they expected to, near the Gates shaft. They followed crevice matter right along from that point there. Don't know whether they had mineral or not. I have been through the drift. There was not much mineral in the back of the drift. The mineral was not played out. I could see both in front and in back of it. There was no mineral. There was crevice matter. I did not see any walls. The wall that they followed here came right in on this drift; I say from this vertical section. At this point they raised up by a zigzag course and come to the top, following mineral up. I don't think it was the same mineral followed on this vein. I think it is the same lode because there is crevice material between. I don't think there is a wall. The width of the Equator varies from three to six feet. I call the pay-streak the lode. When I say lode I mean the pay-streak between country rock. I say that there is country
67 rock on the north side of the Equator, there at that cross-cut. Don't know the condition of it. I say there is a cross-cut driven through the country rock. I didn't estimate the width—anything about it. I could tell it in that level. I said the Equator was from five to six feet wide. I mean across the lode from the south to the north wall. There is what we call walls. I did not say it was the wall of the lode. I said there was a wall, although there might be a crevice behind that. Sometimes a wall is a wall of country rock. We have sometimes what miners call gneiss walls; and there is a crevice wall. I mean the wall of the streak. That wall of streak that I followed was crevice material—I presume it was—through our vein behind that wall into the Equator drift. There was a wall there—you may call it a slip instead of a wall. It might be a slip in the vein. From this point down here (indicating) as far as this has been opened by cross-cuts it is entirely—from the south side of the Equator to the north end of these cross-cuts was entirely crevice material through that entire distance, I believe. There is a wall there. They call it the wall of the streak they have. There is not any wall of country rock there. I did not say that I arrived at the width at all. I did not say how wide it was there. I don't know that there is any Equator lode there. I know they drifted on the streak there. It was barren ground right there. I said it was something of a streak that went in there. I said there was no mineral for 25 feet west. They had vein, streak, crevice. It migh be crevice matter through here, but
it ain't crevice material; just the same as they followed
68 in these drifts. They followed the streak in there without mineral. There was no mineral for 25 feet back, I think. After following barren ground 25 feet through in here there was considerable mineral in there. I think the lode right across is about 30 feet wide. They are about the same length on the map. I guess it would be something over 60 feet. It is all lode material in that cross-cut. I say they have found the north wall, or the crevice there (indicating). The cross-cut is right in there, from the discovery of the Colorado Central. I don't know whether I have found it at any point west of that or not. The character of the rock on the south side of the 360-foot level of the Equator is solid country rock, and here is a cross-cut to the south that is in solid country rock. There is a crevice of it in the drift. I don't know what is on the south side—the walls, I suppose. I examined the walls in some places. I found soft crevice, although here it opens up in this country rock. I did not pick far enough to show country rock. At this cross-cut it shows country rock. The south wall of the

Equator pitches to the north some. The ore right in here is nearly vertical. I never noticed the thickness of the mineral in the Equator workings. There is considerable mineral there, but I did not notice the thickness of it. I saw some; it is 2 to 3 feet. Here is the cross-cut that I pointed out on the other map; the upper one, that is on the other map; on this, too. There is one; here is another one, and here is another one. That one, there, shown on the other map, is all crevice matter through there. I say the top or apex is directly over this dis-
69 covery shaft of this streak of mineral. I never seen the top of that above the bottom of it. The apex of that lode is way up in the discovery shaft. The outcrop of a lode is the top or apex. I don't know what the width of this lode is on the surface. I said each one of these veins was a lode before cross-cutting in this direction. I said it is all one lode from that point out here. This is all one lode at the Marshall-tunnel level, but when that is going to the surface I don't know where the apex is. I say it is all one lode out here on the Marshall-tunnel level west. I don't know anything about the apex. It is liable to be one lode above the Marshall tunnel. If at that point (indicating) mineral was struck at 70 feet deep, and at a point 70 feet south of it the mineral came to the surface in a strong vein, and it is all one and the same lode, I should say the streak of mineral is the apex. I don't know anything about the apex. I don't know whether it is one lode on the surface or not.

On redirect examination witness testified as follows, to wit:

From the Marshall-tunnel level I traced the lode and the ore-streak out to within a few feet of the back of the discovery shaft. It was some feet south of the discovery shaft The supposed apex would be north of the discovery shaft.

The plaintiffs, to further maintain the issues in their behalf, here introduced the witness THOMAS CORNISH, who, being duly sworn, testified as follows, to wit:

I have been a miner 18 or 19 years. Have mined in Clear Creek County since 1869. I was one of the court inspectors that went
70 through this mine. I think I was up there 7 or 8 days in the examination. I did not spend all the time. I went into part of the works on both sides. I had worked a short time on the Colorado Central before I was inspector. From the bottom of the discovery shaft it is connected with the lode with a cross-cut 9 or 10 feet. There is a cross-cut intersecting a vein of ore. It is north from the bottom of the discovery shaft. I can tell from here, the levels are all plain. The point where your finger is where they struck the ore streak. In going west, in the Thompson-tunnel level, I say it intersects with a streak of ore there about 10 feet. Then, about 10 feet further north, it intersects another vein of ore. There is two veins shown there in the two levels between the bottom of the wet shaft and the end of that cross-cut; two ore-streaks between that point and the wet shaft. The reason that the drift is so wide there is that they have taken out both streaks in the same drift. I think they followed the north streak down in the wet shaft. I think the wet shaft is about 52 feet deep. It is sunk in this north streak. It is in the Thompson-tunnel level, between the bottom of the discovery shaft and the top of the wet shaft. The workings that I have been speaking of extend a little to the right of the workings I was speaking of on the big map; are shown here, but that is not a correct representation of the workings. It is a vertical section of it. That is the bottom of the wet shaft (indicating on map). The bottom of the wet shaft

is on the same vein it started on north, and then it continues on west; it continues west—I won't be positive about the length of that.

71 I see it is not marked. It is only marked on the 300-foot level. It continues on the north streak over to what is called the Gates shaft. I think in following down the Gates shaft to what is known as the Gates level it is sunk on this north streak, at this point, 210 feet. Just a little west of the shaft the two streaks are also shown there. Here is no sort of workings; it is all blasted out; it is not what you would consider a level kind of stope chamber. That chamber is wide enough to disclose both ore streaks. This chamber that I speak of is right in the east of the Gates shaft and 210-foot level, the one colored purple on the map—Buck and Fleming level, called the 210-foot level. The north streak that I have been describing, from the Thompson-tunnel level down to the Gates level, is not shown. I left that to the north. I traced the south streak about 10 feet south of the shaft, there or the Gates level. I know it is 10 feet south, because they have made connections with it by stopes, raises, winzes, and shafts. There is a continuous stope or raise from the Marshall tunnel up to the Gates level. Taking a vertical line of it, it would be about the end of those marks there—green, purple, &c.—right on down. The red, ocher, green, and yellow is not all stoped out, but there is enough, so that the connection is made. In places it is the width of the stopes, and in places the length of the raise and the length of the winzes. As far as the lode goes I think it is a wide lode, and if it continues on up to the surface the apex may be a great deal wider than the side lines at that point. These ore streaks I have been describing you can follow them up here; there is a point at the bottom

72 of the whim shaft lays a little north, and it is stoped out up in here, and it shows it on the north side of the line. It is stoped out in that shaft. There is a stope in behind there. I don't know how far that stope goes up; it is just north of the discovery shaft. A stope is the lode worked out over a drift the way we know it or a underhand stope. When it is worked out over we give it the back stope or overhanging stope. And when it is taken out below the level it is called an underhand stope. Here and there is a level. Portion of the ground is stoped out over to this point here at the end of the raise to the west back to what is known as the Wallace stope, at the 340-foot level. I mean the ore has been stoped, taken out, and carried away. The fact that there is a stope between the two levels means that the ore has been followed upon in there. In the Marshall tunnel, between this point and that, there appears to be two lodes at that point; going east they separate. I don't know how far apart they are in the Kirtley tunnel; I was never in there; my explorations never extended east of the Marshall tunnel. I have never traced these lodes east of these levels that I know of. I omitted to mention the Square and Compass. There seems to be a lode there between the Equator 360-foot level, and the Marshall tunnel level; there is some country rock between here and there. I mean I find country rock between the Compass & Square and Equator. Between the Compass and Square and the Colorado Central, I should call it crevice rock. That includes that rock known as

73 Engine material. I think it is all crevice material from there to there. As you go west on these two levels which run from the Marshall tunnel they come together at the manhole. That is the streak of ore this gauge se'm which is running in the lode at the manhole. The Equator and Colorado Central from that point on west seem to be one lode from the manhole. This streak is the same streak that the

Equator was driven on, certainly from there on west. At the manhole the Equator & Colorado Central are one and the same lode. I think they form a junction from there on west, this streak of ore. I don't wish to say that I am taking in the whole lode, because there are several ore streaks. The Equator forms a junction at the manhole with the Colorado Central. I could not find any evidence of its crossing the Colorado Central. The Colorado Central keeps the strike from that point. I could not make any comparison of the width of the two lodes at that point; where they are separate you can. From the point where they form a junction back east, it seems to make all one of crevice rock back for some distance; just how far I can't tell. It shows in that cross-cut there. I think they are one lode at the cross-cut; that is it is crevice material. It is all crevice material, and I should consider them as one lode; they can't be two lodes coming together, as it is liable to show more crevice material, and you can't usually find slip—country rock up to the point of junction. I have found a point at which there is crevice material between the extreme north of the Colorado Central to the extreme south of the
74 Equator workings at the Marshall-tunnel level clear across. From there out it necessarily implies that the two lodes have become one, or they appear to be. And then there might be a junction or spur out here, and they may possibly diverge going west again. From the Marshall tunnel, running to this chamber of the manhole, it shows some ore. In some places there is considerable ore there, but from here out on west to the manhole I don't remember being able to find much mineral there, although it is driven on quite a soft gangue streak, although with what we term a wall; what we term a wall in the drift. I mean the mineral is on the slip at that point; not exactly the wall rock, because there is a junction, and there is more or less crevice rock appearing between them. There is no distinction further west that I could find between the two lodes. From the manhole back east on the 360-foot level the Equator drift did not have a continuous streak of ore; they followed a wall or gangue streak that would be liable to carry mineral at any point, although none was shown in the drift. Both the Marshall tunnel level and the 360-foot level carried an ore streak east of the manhole. The Equator workings is continued on west there, and took that ore streak. The Equator, from the manhole, changed their work to the south from that point. I think they took about the same course that the Marshall tunnel level was driven on; it may have turned a little in there, but we notice at the manhole that the Equator level turned a little to the south from that point on
75 west in that level. In the Colorado Central, from the manhole diagonally across to the foot of the Gates shaft, it is run about 40 feet from the manhole, diagonally across from one streak or wall, as you may call it, to another. Take it in here, because the winze we have been describing is east of that point; here there would be 4 separate ore streaks, provided these streaks were continued out east; but at this point at the manhole, from there for some little distance west, there is three; that is, including the streak that the Equator is driven on. There is about four streaks altogether in this lode; it has three (3) here to where this junction is formed. An ore streak is a part of a lode, the way I understand it, and don't necessarily follow that it is all the lode. An ore streak is not uniform, and it is liable to change from one wall to the other, and some places in this lode, and in fact a great number of places. If the ore in a lode is played out, it is no sign that the lode has played out. In some lodes hundreds of feet of barren

ground is found. The cessation of the ore streak is not the cessation of a lode.

On cross-examination, THOMAS CORNISH testified as follows, to wit:

That is the wet shaft (indicating on map). That is the bottom of the Gates shaft, the top of the Gates shaft ends at the 180-foot level; it did not come to the surface. It is between the 360-foot level, 290-foot level, 235-foot level, 210-foot level, and 180-foot level. I never measured the distance that it lacks of coming to the surface, 180 feet. The
76 wet shaft does not come to the surface; I think the top of it is 140 feet below the surface. At the given point, where I said there were two distinct lodes is somewhere (examines map) between that cross-cut there to the south and the Marshall tunnel, some place; but there has been no work in there. I was unable to examine, so I cannot state. They appear to be two distinct lodes at the Marshall tunnel; that is what they appear to be. How far west they retain their distinctive character, I should think—I can't locate the place exactly—is between this cross-cut there and the Marshall tunnel. There is the cross-cut I speak of, running south, between that and the tunnel. From that western line I think it is all crevice material. I think from that point on west for some distance beyond the manhole; how far I cannot exactly state. The only opportunity we had at that point was to go in this cross-cut here a little west, but nearly opposite to the one I have just stated nearly 22 feet. I see it is marked there 22 feet. There is crevice rock all the way in that, and I do not know how much further east of the breast of that. I think there is crevice rock in that. The point at which I have had the best opportunity to judge of the width of the crevice is from the manhole; about 40 feet west there is a cross-cut running diagonally from this ore-streak in here; it shows across there, and the cross-cut running north. I think it is about 10 feet from the bottom of the Gates shaft, 10 feet east. I cannot calculate how far that would make it at right angles from the 360-foot level, from the fact there is 40 feet driven
77 diagonally across, and the other is almost at right angles, going north from the bottom of the shaft. I should think it was 40 or 50 feet there. I had no opportunity to measure it. The lode or streak that the Colorado Central is driven on, at the other end at the Marshall tunnel, and the 360-foot level on the Equator, they form a junction at the manhole. The gangue streaks actually came together at the manhole. You might consider them one lode, because the crevice matter is proved between them. They are all one lode at that point. It carried four streaks; I don't think I said on direct examination that they were all one lode; I said it was all crevice material from that point west, but I think the junction was actually formed there. Well, it is a junction of two streaks, and it would certainly be the junction of two lodes out here going west. It is a junction notwithstanding the crevice material between them here, and notwithstanding the crevice material appeared between the two here, it actually ended at the manhole; that is the streak in the Central workings and the Equator streak became blended. I said, I think, there was two lodes coming together there; I don't think that is all the Central lode from there on, that streak there. I think there is more of it that extends north of that. At that point they do come together and go on continuously and indefinitely. We do not trace these two streaks of ore any further west. The union is at the manhole; that is the workings of the Colorado Central on to there;

up there to there these cross-cuts you are talking about. From
78 the manhole, the Colorado Central followed into another streak, I testified that it was a portion of the Central lode; and that is the way I want to be understood. From this point they run diagonally across though crevice material to another streak. I could not find any mineral through there. They struck ore in here, at the bottom of the Gates shaft, about 15 feet, where this came diagonally across it, encountered the other ore-streak. From there, up through the Gates shaft here; from there up there, they followed an ore streak up to the top of the Gates shaft; I can say how far it is from manhole; I did not have an opportunity to measure across; but it might have been 15 or 20 feet; I don't know; the ground is broken so as to strike it at right angles; I said there were four ore-streaks there—that is, before they intersected at the manhole. Here is one right there; that is the Equator 360-foot level. There is the Central level in the Marshall tunnel level, and here is the other *other* one. It is not run back quite so far. Here is the other one, and here is the other one there running into the No. 5. That ore streak is followed east from 20 to 25 feet. The ore streak found in the Gates shaft goes right in here. This diagonal cross-cut intersects it right above. This level above would be back of the Wallace slope.—on that level, between the Gates shaft and wet shaft. I think the Gates shaft is sunk on the extreme north streak down to the Gates level; I think it is sunk on the streak there. I cannot tell how high it is above that until I figure it out.
79 Here is the top of the Gates shaft there. Of course it is from the tunnel level up to there—that is, up to the top of the wet-shaft. There is a cross-cut at the Gates level that shows the four streaks. I think the cross-cut is about 40 feet long. The cross-cut running south from the Gates shaft shows four streaks, I think. It runs about 40 feet to the south; it intersects with the slope just west of the Bell shaft. That develops and shows the ore that is in the Equator 360-foot level. The south one there, there is no work upward on it. The works that are connected on the works above is on this one in here. You run diagonally across from the manhole, and intersects with the streak that is shown in the slopes above, and connected with the Gates shaft. At the back of the Gressenger slope—Gressenger level—the walls diverge; consequently, it shows four streaks up in this cross-cut by the divergence of the walls in their upward course. The four ore-streaks are seen further north. I don't know that it has been followed further east. The intermediate streak has been followed as far west as this point. I think the intermediate streak is worked out there further than the Wallace working. That intermediate streak has been followed east at the 380-foot level, followed to this cross-cut—that yellow mark there. I don't think it has been followed any further. That is the Colorado Central. That is the Equator. The intermediate streak has been carried to the surface by working up through these workings—the Wallace slope. Then there is a connection made from the back of the Wallace to the 330-
80 foot-level, by a winze that corresponds with the Gressinger stope, up the Gressenger stope, through a raise, and then you can follow it clear up right along in the connections, and you go up the wet shaft, that is as far as we could go; that is 235 feet from the surface, I think that one is carried to the surface because the only working appears—I think it is on that streak; there are no openings to show that it has been carried up. So far as I know, there is nothing to connect that streak with the 380-foot level. This one has not been carried to

the surface. That one has not been carried to the surface. That is the one they have been working; it has never been carried to the surface. I think you are mistaken. I didn't say that streak was carried ten feet north of the discovery shaft. I think the ore vein is at the bottom of the Gates shaft that intersects. There never was any connection made directly on the streak. At this connection there is a mineral vein 10 feet north of it. I think that is the intermediate one. The bottom of the discovery shaft of the Colorado Central is not on an ore vein. Of course I did not follow through this stope, as I stated in my direct examination, but when you go in north in No. 4, you strike those two streaks; the bottom of the discovery shaft extends about 10 feet south of the streaks. I don't think there is any mineral there. The bottom of the shaft is not on it, and is on no vein of mineral at all.

On redirect examination, THOMAS CORNISH testified as follows, to wit:

The bottom of the shaft is on the crevice, and it is sunk through
81 a crevice. I don't know how deep it is sunk through the crevice. I don't know how deep the slide is just at the upper place, the shaft is closely cribbed, and it comes down directly on the crevice, and the shaft is vertical, and from where they paint it, it shows under the slide. The lode has a slight dip to the north, and the vein consequently getting a little to the north of the bottom of the shaft. I tried to explain that about sinking that shaft, but Mr. Reed would not allow me to go any *any* further. The shaft is a little south of the ore-streak, though it is sunk through a crevice. Mineral is a part of the crevice. You may have a well defined crevice, and yet have no mineral. On yesterday, when I traced the lode above the Gressenger level—from the Gates level to the Gressenger level I traced it from the Gates level. I don't know as I can trace it on this map. I think we traced it from the 360-foot level. I traced it right up through on the other workings that was made right on the ore-streak up to the Gates level, and from there there was an opening east through the shaft, which shows two streaks again, about 26 feet I think it is; well, about there; you can't come up right on the streak; it is filled in with rock, and some places marked, but it shows it is on the same course in the shaft there, and so on up 26 feet above again in the shaft, the 180-foot level which would be the level between, the top of the Gates shaft and the bottom of the wet shaft. There it is shown on the south side of the level again where we blasted into it, and also in the cross-cut about 10 feet south of the level the bottom of the wet shaft, that streak, and from the bot-
82 tom of the wet shaft up to the Thompson level—that would be this one—there was a cross-cut; it is filled with rock at the present time. About half-way up that 46 feet, about 46 feet up here from the bottom of the wet shaft to the Thompson level, and about half-way up that shaft, it would make about 23 feet, there is a little cross-cut run into it there about 10 feet, showing the ore vein. In the Thompson-tunnel level between the discovery at the top of the wet shaft, both streaks of ore are exposed by a large streak, which is shown on this wide map right here; well, there both streaks are shown for about 20 feet I should think; I never measured it. Between the wet shaft and the bottom of the discovery is the place I have already described on the other map; both streaks are shown and there is a cross-cut 9 or 10 feet from the bottom of the discovery shaft to the north streak. That is the cross-cut at the bottom of the shaft; the shaft is a little south of the ore streaks. This ore vien here is stoped out—I don't remember the

depth of those levels right in there; I think it is the 120-foot level there—and then it is cut in a little about 6 or 8 feet north of the shaft and strikes on this shaft, and then up here to the 80-foot level, takes this spur on this lower vein here; on the Thompson level is north of the shaft from the fact that the ore streak from 130-foot level dips a little from the north, a slight dip from the north, and the shaft is vertical, and by blasting into the sides 6 or 8 feet at these levels, and connecting with these ore-veins, and up at the 130 it is just about in the shaft, and so on. This is worked out west; before I examined it at all,
83 it had been stoped out; it looked as though it was stoped out near there, just how much I could not tell; of course the shaft was closely cribbed, and it appeared in a shaft in a level there; I know at this level here, and the 130-foot level above that, of the ore streaks; don't remember of noticing two of them. There is a drift east and west of the discovery shaft nearer the surface than that, but I can't tell the distance, it may be 70 or 80 feet, I won't be positive, because I don't know. That ore-streak is the same one that is worked up here I could not tell what kind of ore it carried or its thickness, because it is stoped out generally; oh! there is, at this level here, there is two or three feet mixed through with ore. It appeared to be low grade there. In other parts of the mine, take it at this point, at the wet shaft just there about 26 feet above the Gates level it shows three or four feet of ore there. I found the north wall of that mine in the cross-cut from the bottom of the discovery shaft running north from the Thompson level, that would be just about here. That cross-cut is right about here in the end of that, good solid country rock, the wall of the lode proper. I should think we drove three or four feet through good country rock, as solid as anything in the mountain. I don't believe I was ever in that cross-cut going south, I was in the cross-cut beyond. I was in as far as the winze in this level. I never went beyond the winze south. In the Equator 360-foot level from the manhole east, for the first 100 feet or 125 to 126 feet, I could not find any ore, some places at the back of that there was some ore.

On recross examination, THOMAS CORNISH testified as follows,
84 to wit:

(Mr. Reed referring to vertical section.) It seems to be a representation of the Gates shaft; what we term a vertical section of the discovery shaft and Gates shaft down to the 380-foot level, vertical section of the Gates and discovery shafts. The Gates shaft, from the surface down to the bottom, is about 140 feet, and thence there is a cross-cut about 9 or 10 feet on the lode, and then driven on the lode between these two ore-veins, as I have just described, west; thence down the wet shaft, I think it is about 46 feet; and thence by a level 60 or 70 feet to the top of the Gates shaft; thence down to the 380-foot level, and that is that plat. It seems to represent the vertical section of that mine. It is a representation of three or four shafts, extending 3 or 400 feet distant longitudinally on the lode. It is not a vertical section right through; neither of the shafts run right through to the 380-foot level. You go north from the discovery about 9 or 10 feet. Going west—I never measured it—I should think it was 60 or 70 feet, according to this map, where that level west for 60 or 70 feet would intersect; it is supposed to intersect the top of the wet shaft there. Wet shaft at that point is 70 feet west of the discovery shaft. I won't be positive. The next set-off is west again from the bottom of the wet shaft about 70 feet I think. I never measured the distance. It would intersect the next sink out

here. I should think this point would be about 140 feet west of the bottom of the discovery shaft. My stick is at the bottom of the discovery shaft; there is a perpendicular section. This vertical section represents the distance from the top of the wet shaft to the bottom of the wet shaft—to the Gates shaft I see it is marked here. No; it is just simply the level; it has not the distance. I should think it would
85 be 140 feet, taking the length of the levels between the shafts. From that point I got about 100 feet westing. It would be from the top of that shaft down to the 380-foot level. I said I traced the vein from the bottom here continuously up to that point (indicating on map), not directly up the shaft, I explained that; from the Gates level I traced it directly from the 380-foot level up to the bottom of the Gates level, and then to the 210-foot level back to this shaft, which discloses it again. In this cross-cut in this level you come back 9 or 10 feet before you find that vein. There is another vein—I should suppose it to be the same—a few feet back. There is a vein that the Gates level is driven on; then directly south 9 or 10 feet is the other one, but it is not in the end of the cross-cut south of the shaft; that one is followed up 9 or 10 feet south of the shaft. I told you before to follow that up; that I would have to go out of the shaft, and go up to the 210 foot level, go up, and just at the end of the shaft, a little east, it struck back a little bit, and there discloses a streak of ore; the distance from there to there (indicating) is 25 or 26 feet. I followed the vein from that point to that point; there is a vein in the 380-foot level from the top of the Gates shaft about 150 or so feet east; blasting into the side of the level, discloses it there again; that is run on what we call the north ore-streak; by blasting in to the south side 20 or 30 feet east or west you find the top of the Gates. There is a streak of ore there; at that point the distance apart seems to me is about 9 or ten feet, from the fact that this level is run to the south, and there is all the width of the level,
86 5 or 6 feet, may be a little more, and consequently it is not so far from that, what we call the north ore-streak, that was drifted and stoped out. There is a little piece of ground left at the wet shaft, and shows 4 or 5 inches of mineral. The size of the ore-streak where or 10 feet from where the blasting was done south would vary from one foot to 14 to 15 inches. I could see it on the strike of the vein about 10 or 15 feet. If carried back on its course, I should say it would be from 8 to 10 feet south of the top of the Gates shaft on the strike. I followed a vein from this point to that; that is sunk on the vein, the north ore-streak. I saw evidence of the vein to the south of it, the whole distance. About half way up this shaft there is a cross-cut in there, and considerably stoped. The size of the vein that I call the south, coming into the wet shaft, had been drifted on and stoped out, and of course I could not see the size, but on the north it showed a gangue streak, and I saw some east of that shaft three or four inches thick. This is the present Thompson tunnel; it was driven from the top on the lode; there is a vein on each side of it about ten feet apart; the vein is took out, and I saw to the south one 15 to 16 inches of ore along there for some little distance, for 15 or 20 feet, and some places where there is none at all. I said from the top of the Gates level. I suppose they were one and the same vein, because the connections were so close from one point to the other, and their position was about the same. This is my opinion only. I did not say I could get by on the strike, because there were no openings. I think I saw ore about the 80-foot level—
87 I mean in the shaft—I am positive I have seen ore there that distance of the surface. I saw some stoped out right in the end of

the shaft. The general course of this vein from about the 80-foot level the vein has a slight dip to the north, and the shaft is vertical the distance of about from the 80-foot level down to the Thompson tunnel level, and below that they seem to be almost vertical. Both streaks are vertical for the same distance I suppose.

The plaintiffs, to further maintain the issues on their part, here introduced the witness, NATHAN S. HURD, who, being duly sworn, testified as follows, to wit:

I knew the Colorado Central lode when it was first discovered in 1872. I did a considerable amount of work on that lode. The McCoy shaft was 120 feet deep when I first knew it. The discovery shaft was about the same depth. There was a connection between these two shafts when I went work on the McCoy shaft; the drift was run probably 50 or 60 feet west from the McCoy shaft towards the discovery shaft. We worked on the McCoy shaft until we intersected with the level that was being run on our same level from the discovery shaft. We drifted from the McCoy, and somebody else drifted from the discovery until the connection was . The McCoy shaft was sunk in gravel and boulders for some depth to the top of the lode; then it was sunk down on the lode a certain depth, and then drifting commenced on the lode, and we drifted on a vein of ore nearly all the way for 100 feet. The other parties had a vein of ore in the discovery shaft. I don't know whether it was actually inside of the timbers or not.
88 There was one streak of ore that was probably 5 or 6 feet from the shaft, and one that was still further to the north; one of these streaks was good ore and the other was lean; the furtherest one to the north was the lean streak of ore. They were very close together in the drift; they were both exposed in the connection we made running from the McCoy. The first as you go towards the discovery shaft it gets lest distance from the surface about 120 feet; it would be about 40 feet I think below the surface of the slide, and when that drift connected the two shafts and the surface shaft, it ran right up into the slide—right up into the surface; it was stoped out; where I did the stoping we had mineral clear up into the sand and boulders. That was the point 100 feet from the McCoy shaft, all along. We stoped to where we made the connection with the parties that was coming towards us. The third ore-streak that came in right at the corner of the shaft if I remember correctly, on the lower side of the shaft, came in quartering across the lode, that was on the south side of the lode. That made three ore-streaks; I think they were all worked up to the sand and boulders. I think in working this end streak that was on the north, we had to work on both of the streaks. They were there close, I am certain of that, at least there were two of them worked to the sand and boulders. The ore varied very much in thickness from right where we made the connection between the two grounds; there were two different leased grounds at that time where we made the connection; we put in timbers 12 to 14 feet long, and the whole top of our drift was 12 to
89 14 feet was ore scattered through our rock. This was sand and boulders; as we go further up the shaft the ore got more well defined and cleaner. At that level we had from two inches to two feet width of ore. I knew of the Shea shaft; I did some work in it. I think we sunk 10 or 15 feet deep when we went into it. It was probably 40 to 50 feet deep then. All these shafts were sunk about a year, may be less, after the discovery of the lode. We exposed a crevice in the Shea shaft and we did some cross-cutting there. We cross-cutted from the Shea

shaft south until we got inside of the ore, and the drift would probably be from the extreme north and to the extreme south end of our drift 15 to 18 feet. Then we drifted towards the discovery probably some 15 to 20 feet or more. When we commenced the cross-cut there was no mineral in sight, but as we drove the cross-cut, we disclosed the vein of mineral, and we followed it in our drift as we drove towards the discovery shaft. We did not cross-cut to the north. There was no country rock that I saw there. There was no connection made between the Shea shaft and discovery' and McCoy. We always supposed this was the same lode as that in the McCoy and discovery. I knew the side lines of the lode at that time. I have seen the stakes. The discovery shaft was between the center of the side lines. My impression is that the Shea shaft was in the center. I know the surface location of the Reed shaft; I never worked in it. I think I was down it. They had not struck a crevice in it; can't say whether it is in the side lines. I know what is called the Delany cross-cut; it was between the discovery shaft and the Shea shaft. It was a cross-cut commenced on the surface of the
90 ground, and runs in an open cut; it struck the Colorado Central lode; and was drifted from there into the workings that had been worked from the discovery shaft towards the Shea shaft. There was a connection made there. I think that the first connection was made by running between the sand and boulders and the bed rock, and then sinking down as they got up some. There was two connections made; one was made by a party working for me, and the other was made by Mr. Delaney. The connection was made as I was stating, by running on the bed rock between the sand and boulders, getting to a point 30 or 40 feet where they made an angle, and then sunk down and made the connection there. And the other connection was made by going straight into the cross-cut, and sinking down on the lode, and then drifting towards the discovery shaft. I made the examination of the workings that was connected from above. At the time I worked there on the lode it had been opened from the Shea shaft to the Robinson tunnel, and some little distance beyond the Robinson tunnel. There was no connection between Shea shaft when I worked there. The connection had not been made between the Shea shaft, and the discovery shaft. The Delany workings were east of the Shea shaft some 60 or 70 feet. They had been connected with the discovery shaft, and the discovery shaft had been connected with the McCoy shaft, and the McCoy shaft had been connected with the Robinson tunnel. That lode has an apex; I know where it is. I know the lode is all stoped out from the level that we run from the McCoy shaft;
91 we stoped right up into the sand and boulders, that is east of the plaintiff's end lines; well, beyond that in the other workings they done the same thing; they worked right up into the sand and boulders, I think all the way along. The apex of a lode is that portion of the lode that comes up to the surface of the surrounding rock, that I would call the apex of a lode. I mean the top of the bed-rock; the slide has nothing to do with it. The apex of a lode may be 50 or 100 feet under the slide. These workings up to the sand and boulders disclosed the apex.

On cross-examination, NATHAN S. HURD testified as follows, to wit:

At a depth of 120 feet in the McCoy shaft I commenced running west, and ran about 100 feet, in the year 1876. I commenced about 40 feet I should judge, below the sand and boulders. We had a vein the width of our drift to run on, 5 or 6 feet; the width of the mineral was

from 2 inches to two feet. The vein was not the width of the drift. I think; for the 100 feet it was all mineral but a few feet. We had 3 feet solid mineral. We ran it as far up into the sand and boulders as we could get up. From the top of the rock the mineral extend' into the sand and gravel some 3 or four feet in places; on the sides of the mineral was sand and boulders; it was not solid mineral; there was one place we put in stulls 3 or 4 feet long. I was going to explain that this mineral run up into the sand and boulders, and we put in the stull in order to brace up the sand and boulders so that we could get the mineral out. Of the distance spoken of we had two feet of mineral for a very short distance, about 8 or 10 feet. It might average
92 4 or 5 inches for the whole distance. There was a portion of it that did not have any mineral in it at all. The position of it, I should say, was perpendicular; it might have departed from perpendicular. I could not tell which way Mr. Weaver worked. West of there, to the discovery shaft, he had a lease of that portion of the ground. They had a larger vein there than we had; would average about a foot wide. I think it was vertical there. They carried it up into the gravel. I think I said they worked west of the discovery. I think Mr. Weaver worked west of the discovery shaft; he worked west and made connection with the Delany cross-cut, or what is call' the Delany cross-cut. I presume that would be 40 or 50 feet. I was in it every day for some time. That was a very large vein; the larges' I ever saw in a mine. I think it was all a vertical vein. I say the apex of the lode is that part which comes to the top of the rock where the sand and boulders commence. I have seen places in that lode where it is 20 feet wide. If there was any point within its width where the ore comes higher than the point I have testified to, I don't see how it could help but be the apex. I presume it would be the highest point on the lode if it was all one lode. My understanding of the word apex is that the top of it in solid rock, and one part may be higher than another right opposite, it would all be the apex. It might be at two points. I was going to remark that the apex of the lode in one place might be higher along the same lode; it might be at a angle than that, and another point might be higher than that. And in a wide lode like that
93 might be and not be in a straight line. The distance from the McCoy shaft to the discovery shaft is 220 feet, I think. If that lode was 50 feet wide, and for the whole distance of 220 feet there was another point where the top of that mineral was 40 feet higher than it was on that line, I presume the higher line would be the apex.

On redirect examination, Nathan S. Hurd testified as follows, to wit:

I should presume the entire width of the lode at the top would be the apex. I presume the highest point would be the apex of the lode, although the apex might be from one wall rock to the other. One wall rock might stand on an angle 45° from the other, and I would say the highest point, technically, the highest point would be the apex.

The plaintiffs, to further maintain the issues in their behalf, here introduced the witness JAMES SMITH, who being duly sworn, testified as follows, to wit:

I am a miner; have known the Colorado Central lode since 1873. I have been in the discovery shaft. The discovery shaft was sunk on the vein. It had ore right over below the 80-foot level, that is where I commenced to work, below the 80-foot level in the shaft. That ore

in the shaft was stoped on east and west. It was stoped east to the McCoy shaft; it was stoped out west to the Delany cross-cut. I should judge that that was about 40 or 50 feet west of the discovery shaft. I am not certain about that. The lode was drifted on from the 40-foot level in the discovery shaft. I drifted on the lode west
94 from there, and broke into Delaney's cross-cut with a drift beyond, or that is the side of the drift broke in; he had excavated a little hole down from the top, that is from the sand and boulders' sunk down and broke in in drifting west—the bed rock raised—the lode raised and went west on top to the discovery shaft; went 40 feet down in the sand, and as we went west we got into the crevice itself—the mineral—and there we broke into the Delaney cross-cut. There was a drift right at the top of the bed-rock; we did not run into the slide with our drift. Delaney had run the cross-cut up the hill in the slide, and then he sunk a little hole down on the ore. It was a small shaft. It was within four or five feet of the surface on the Colorado Central. We took the ore that run into that slide; took it out a little further west. Above the 40-foot level it was worked out to the slide—to the top of the discovery shaft, so that there was no slide scarcely on it where we struck it. That level was run on the top of the lode. That level was run in some 50 or 60 feet. There is a drift connecting the McCoy shaft, and the discovery shaft, called the 140-foot level. The connection was made with the Robinson tunnel. I don't know what it is driven on. I have been through it; it shows mineral in some parts of it.

The plaintiffs, to further maintain the issues in their behalf, here introduced the witness, TIMOTHY SHEA, who testified as follows, wit:

I am not the man whom the Shea shaft is named after. I helped to sink the Reed shaft. We took hold of the Reed shaft in the
95 latter part of 1873 and early part of 1874. When I commenced in the Reed shaft it was 125 feet deep, I think; never measured it. I found a crevice in it; can't tell the width of it; probably 25 feet altogether. We cross-cut to the north. I found what I considered to be granite rock at the end of it, the north end going south. I did *I did* not find any granite; it was crevice rock, I think. I run the cross-cut north 25 feet and struck granite. We run the cross-cut south about 20 feet. I did not run it, for it was run considerably when I went there; the end of it was crevice material at a depth of 125 feet. I think we struck the granite about 25 feet north.

On cross-examination JAMES SMITH testified as follows, to wit:

That shaft was not connected at that time with any of the other workings on the lode. The cross-cut running south we struck in a reddish rock, considered crevice material. We had a crevice of 45 feet with what I considered a wall on the north, so much so I quit working that way. Did not find much mineral in the cross-cut. Don't know that I ever sold any of it; generally broken up and spotted. There was some little spots occasionally, not continuously; the thickest I saw was about an inch.

Plaintiff's counsel, to further maintain the issues in their behalf, here introduced GEORGE W. HALL, one of the plaintiffs, who, being duly sworn, testified as follows, to wit:

I believe I am one of the plaintiffs. I have known the Colorado

Central lode since its discovery. I have superintended the actual workings of the mine for about a year. I had done mining be-
96 fore. I have mined two or three years altogether. Had more or less to do with mines ever since I have been in this country, which is about 19 years. I have superintended the workings at the Colorado Central Mine personally. I have been in all the workings of the mine. There is the discovery shaft about 140 feet deep; it is sunk on crevice material, and there is levels run from there in different points; one I think, is called the 60-foot level, one the 120-foot level. I have not been through the old workings very much, for the reason the timbers are very much decayed and caving in, but at the 40-foot level or 60-foot level rather, I can go in there and see it had been stoped out, and that the sand and boulders had caved in. Down at the 80-foot level there it is cross-cutted to the north and south from the discovery shaft, and is exposed running from that point on either side of the shaft, and some mineral in sight there now, and I think the cross-cut from that level to the north is run into the country rock. That is about the 80-foot level. The next level below that, called the 120-foot level, there is no streak of mineral in sight now, which has been stoped on east of that point, and, I think, also west, but not stoped right opposite the shaft, and still further north is another mineral streak. I suppose there have been levels run on it and stoped to that. There is no mineral in sight at that point now; that is, at the north streak, the second streak from there. The next is the 140-foot level or Thompson-tunnel level, as it is sometimes called, represented here, and also in this section. This level was originally run diagonally from the
97 discovery shaft northerly until they cut a streak of mineral, and then it was run westerly to what is called the wet shaft at that point. That was run on the mineral streak there, and for all I know all the way, I could not say as to that, but on this side of the level, that being between 10 and 12 feet wide. I have no recollection of ever measuring it, but it is somewhere between 10 and 12 feet. On this side there is a continuous streak of mineral running all the way along on the south side of the level. On the north side at the level there is another streak that is being worked now. This is the east end of the workings on that streak where this offset is. This streak on this side runs off into this level, running a little beyond the cross-cut. This cross-cut here is run to the north in country rock. I have never been into the cross-cut running this way. I don't know what that is. I have been up this working here and also through the level here. There is some mineral in sight now in this, what is called the Thompson streak, and this part of the working here has been stoped out for some distance. This has been stoped on and in fact they are stoping on that streak now, and in that to the east the width of the mineral; the streak of mineral has varied from 2 feet down to perhaps 5 or 6 inches; the streak on the north being the largest along in that level. Then this level has been run west, but from this point here where it makes a turn was not run on a regular mineral streak; it was run partially across the crevice matter. It was run before I had anything to do with the mine, and I don't know why it was run. That was this level continued west; it is not shown on the map, but it is continued
98 west about one hundred feet, and cross-cuts run in three places through this level into the old workings, into the old stope; then going down the wet shaft we land in this level represented by the red lines, also here—this is the level running from the discovery shaft to the wet shaft (points to the horizontal section), going down there we

come to the 180-foot level so called, at the bottom of the wet shaft represented there, from which there has been a cross-cut run to the south. I think it must be very nearly 100 feet in length. I never measured *it* its length, and as you will see here, running to the center or perhaps a little past the center of the side-lines of the Equator patent some 30-odd feet, and it is running in country rock, the south end of it perhaps more than that. I never measured where the crevice rock ends, or where the country rock commences. It would be about 180 feet west of the Thompson tunnel in this cross-cut. Including the mineral streak that appears in the level there is four streaks of mineral, perhaps I might say more than that; in this what I term a mineral streak between the two mineral casings, in which we find the mineral, whether there is mineral or not I call it a mineral streak, and by which we always find the mineral. There in that mineral streak, I think we have as many as three streaks of mineral, even though it is scattered, the full width of the level at this point next to the wet shaft. By running west about ten feet, well, from 10 to 12 feet south of that level in this cross-cut, is a streak of mineral that is perhaps about two inches,
99 from an inch and a half to 2 inches. A little further south is the third streak, and still further south is the fourth streak, on which a winze has been sunk, and the average of that streak is perhaps from 5 to six inches in thickness. Then going west in that level that was driven on the mineral streak and has been stoped out, and for some distance up that streak of mineral laying on the north wall, or mineral casing, and just south of the side of that level is another streak of mineral which we have lately opened into, shown by that, when I was there, being about 10 feet south of the streak that was worked when that level was run. At this point where we cut that streak of mineral that is about 15 to 18 inches, and we are now working east and west on the same streak, it being about vertical as far as we have gone on it. Just below that 26 feet there is another level run to the east on the streak of mineral; that was this shaft; this shaft was sunk on what is called the Gates shaft, is 52 feet in depth; 26 feet from the top of the shaft was a level run to the east on the streak that shaft was sunk on, and then working south about 10 feet another streak of mineral was run into at that point, which at that point varied from 15 up to 27 inches, solid mineral, that runs through the whole 10 feet, was mineral, as some of the miners of the country term it. The mineral is scattered all through the crevice material, quartz the width of it; all through the regular streak of mineral has varied from 12 inches to 27 inches. I measured it one time 27 inches. It is not the same size all the way, as far
100 as we have gone on it; drifting east it is a little smaller, and is split up, making a good distinct streak of mineral with the mineral scattered in the quartz between the two streaks. That is the level I was speaking of, also shown by the same color (brown). What we have always called the Gate' shaft, is the portion of the point to here, as deep as they could on account the ore getting so bad we had to stop. That was sunk by Mr. Gates was called the Gates shaft. The balance of the shaft is called a raise. It is properly the same thing, making a perfect connection or nearly so at this point, being right there and there. At this point the level 26 feet below the top of the Gates shaft is a cross-cut run to the south as shown here, and the mineral streak connecting at this point. There is a very little mineral in it, but it is a mineral streak nevertheless showing two side walls or casings to the mineral of the quartz. That level has also, the same level, has been run west about 30 feet on mineral and stoped out. Part of this level

is shown by the red line; 26 feet below brings us beyond this level shown by the yellow lines. Also here we call the 235-foot level or the Gates level. At that point we have drifted east and west on mineral; also at this shows at this point about 10 feet south; no, we have not worked to the south in from that point to ascertain whether there is any mineral streak in there or not; but we have been working the streak that was in this level here, and stoped up here at this. There is some connection made between this level and this one, 26 feet, the connection made between this point and this being stoped right
101 through. There we run a cross-cut to the south, and cut a mineral streak in there. There was no mineral at that point, but that was a mineral streak, having the quartz and material which we always find in the mineral streak, showing two casings; and at this point, I think, about 24 or 25 feet from this level, at the north, was another mineral streak cut, with some mineral, from which we run a level both east and west, and stoped up on it. Running still further west to the south about 18 feet we broke into the Equator workings and stope, which is being worked by the Equator folks. Then the next level here called the 290-foot level, or Gressenger level, there we have run about 80 feet in length on a mineral streak, with more or less mineral all the way. The most of the mineral west of the shaft, at this point there is the Gates shaft, or raise, as it is called—this shaft—it connected from the bottom of the Gates shaft down to the Marshall-tunnel level, with a cross-cut 8 feet to the south, in this way, right straight from the shaft 8 feet, and cut this streak of mineral here, and that is stoped up; then, I think, the stope is carried up some 25 feet or perhaps 30 feet, and then a raise made through to make connections with this level, called the Gates level. Now the streak of mineral that we worked here on this green level, just above that level, one spur of it bearing off to the south in going up and the other going up vertically. Then, after making connections, we started at this point, and sunk down 10 feet from the bottom of this level, and broke through the raise or stope carried
up from the green level at this point. We run west on that
102 mineral streak about 20 feet on *on* this, broke through the bottom, making connections with the same raise on the north side, leaving a vertical wall on the north from the Gressinger level up to the Gates level, 55 feet, and on the south the same distance, breaking through into the level just south of these workings here, called the North level. Have a wall all the way through here, with the exceptions of some 10 or 15 feet, where the miners left about 2 feet of rock on the walls, perhaps 3 feet, somewhere between 2 and 3 feet. At or near the west end of this level we sunk a shaft or winze 20 feet on the same mineral streak; then running west 13 feet, broke through there into the workings of the Equator Company on the same streak of mineral, then through that we have a connection with the top of the Wallace stope into the same workings, which is carried from the Marshall tunnel about 40 feet, I think it is—50 feet from the Marshall tunnel to the top of the stope—it is opposite the shaft, it may be a little lower, as you go west. Here there is a connection through on this streak from the Marshall-tunnel level for 150 or 160 feet in height, carrying the same wall all the way. That map represents 150 feet of the perpendicular workings. This represents the 180-foot level at the bottom of the wet shaft. This is the level here with a cross-cut running to the south. The level here shows here about 80 feet in length from the wet shaft. Gates shaft also shown here, that is the 180-foot level; this is the Gate' level, 52 feet lower. This is the level 26 feet be-

low the 180-foot level called the 210-foot level; the same is shown here. The level is covered by the red lines being right under it, with the exceptions of where it started. We hadn't time to take in the other streak; that is shown here, and also the cross-cut. That is the top of the raise, 130 feet, or about that, from the Marshall-tunnel level to the Gates level. That represents our stope carried up from the Marshall-tunnel level, making connection here with the Equator workings, and from the top of the Equator workings up into the Gressenger level, and from the Gressenger level it is stoped up 25 or 30 feet; and further, we made a raise through about 10 feet along to the full width of the crevice, which is the north wall, was vertical, and the south wall dipped to the north or to the south as you go up, widened out until at a point about 10 feet below the level, that was 15 feet wide, where we made connection here with the Gates level on the south side, and stoped up about 20 feet above that point. We had a good body of mineral all the way through, and also in these workings here. The Gressenger 290-foot level, in following the mineral streaks from the Marshall-tunnel level up as far as we stoped and above this level, we have not worked in upon that streak at all; we go up to this point where we are sinking on what we supposed to be the same streak, although there is no connection from this level to this one. There is a tracing of the Thompson-tunnel level or the 140-foot level, the different levels being right over there makes it so it can be seen to advantage, and that rep-
104 resents that level. I have nothing more to say about that only that it shows all the workings on that level, including the Thompson tunnel. Here's the discovery shaft; there is a cross-cut running north; there it turns and runs more direct to the north; here is a level running west, the mineral streak on this side, and also on that side, being about 10 feet apart, the wet shaft here and the level running west from there with only one cross-cut leading down there, and here is a stope starting east on the streak of the mineral down before I come in possession of the mine, and there has nothing ever been done with it since; I don't know whether the mineral is good or not; there is not much of it in that point. There is the next level below the Thompson-tunnel level shown here with a cross-cut running to the south, and the winze sunk on the south streak, and a winze started there on a streak of 10 feet to the south of what we call the north streak. That was the red level which connects with the Gates shaft. Then the wet shaft is shown here at that point, is 44 feet deep, going down that; that is the Gates shaft rather; going down that 26 feet we come on to this level, shown by the same colors here, being worked out some 10 or 12 feet. We had to take in both streaks of mineral at this point (purple color). The same is shown there with a cross-cut running to the south. Next comes the Gates level, as shown here, also there, with a cross-cut to the south; here is the south level, also shown there, representing all of the workings on that level (yellow color). Next comes the Gressenger 290-foot level (colored green). In going
105 down the raise 55 feet we learned in this level where we cross-cut to the south 8 feet, where to get this streak of mineral. Then, going west, we go down through this into the Equator workings, and from there down into the Wallace stope, shown by this tracing (drab color), running east and west, or southwest and northeast, which is shown here, being nearly all covered up by the workings above. Now at this point, at the discovery shaft, the mineral we have been working on since I got the mine is north of the discovery shaft, while at this point further west, represented here (wet shaft), this winze or

shaft was sunk on the mineral on one mineral streak, and the other lays on the south side of it. There it is south, for the reason that our discovery shaft is in the center, or about the center, of the patented lines. While cross-cutting here we get near the north line, and so on down; at this place we are about the same distance from the patented lines. That work at the wet shaft, and all of our workings, with the exception of this cross-cut from the 280-foot level, or 180-foot level and the 140-foot level, is all within our side-lines, except the cross-cuts to the north, which are running outside of our lines to find the wall. At this point we have the north wall, and at one point above. All the workings of the Colorado Central is within our patented location, with the exception of this cross-cut, which was not run by me; this—I don't know anything about this. The 360-foot level of the California Central represents the lower levels. This being the Equator level, and this the Colorado Central, running
106 from the Marshall tunnel. This is the Marshall tunnel. There is what is called the Square and Compass between the two levels. This is the Marshall tunnel, that is the Square and Compass, and that is the Colorado Central, what we call the 380-foot level, or the Marshall-tunnel level. And this 360-foot level run by the Equator level, connecting inside of our patent at the east, and inclining to the north until they connect at this point, where they make a turn and run off more to the south. These levels, running from the Marshall tunnel, run on the same level, or within a foot or two of the same level. At this point we break through into the Equator level. The distance from the south side of the Equator level to the north side of the Colorado Central level, I think, is 12 feet or about 12 feet; it may be 13. Then when we got at that point we took a diagonal course across the lode to this point where we commenced to raise to make a connection here with the Gates shaft, as shown here, and then followed a mineral streak. In running from this point westerly, we have no mineral until we reach this point, here. I think there was one very small seam of mineral in it, a little east of that point; just east of that raise we cut and struck mineral which we drifted back east, and almost west. And the Wallace stope, as spoken of here, is carried up from this level making connection with the Gates level. That is, the Wallace stope runs up to this point and then by connection from that with the Equator workings, and then from the Equator workings into
107 the Gressenger level, and from the Gressenger level up to the top of the Gates level. Here was a cross-cut into the south, which is all in crevice material. Here was one run also by the Equator folks, to the north, with which we made connection, when we run our level out as far as that, being all crevice matter through there. From here, and from that point back to this cross-cut run to the north. It is, I am not certain whether it is run towards the north wall, or not; I have not been through there for a long time, but I have not seen the north wall; it is very close to it, from the appearance of the rock also in this cross-cut, and in this one I believe that is all. I have examamined the drift run by the Equator, from the Marshall tunnel westward. I examined the manhole very closely; I made the examination on the 22d, somewhere; I was with the court inspectors. In going west from the discovery shaft or engine shaft No. 1 east, when I come to the manhole I then stopped and went back with the inspectors, or two of them, to see where the mineral was, and when we found mineral we had measured from the manhole—it was 126 feet—there we found a little streak of mineral; about ten inches long, and we called that the

mineral streak, and measured from that point to the manhole; and then we went back 50 feet from that point still further east before finding any more mineral; and there we found a streak of mineral about 8 feet long—the first one 10 inches long, it might have been two inches thick. For the distance of 126 feet from the manhole on
108 the Equator drift to the little bit of mineral 10 inches long, and 50 feet beyond that, to the streak of mineral of 8 or 10 feet long, making 176 feet back of the manhole, where there is no mineral to speak of, is all we found. The drift, however, is run on what I call a mineral streak. The 380-foot level is run on a mineral streak, followed all the way to this point on mineral, there being at this point, along in here, mineral, I suppose, about six inches, it may be 10, but I will call it 6, laying here at this cross-cut west, for perhaps 15 feet, and there it disappears in the roof, and does not come down below at that point, but there is mineral scattered from that point to the manhole, however, in very small quantities; and right at the manhole is a streak of mineral, or was there a few days ago when I looked at it. I made a raise from that 380-foot level since, about 40 feet east of the manhole, I made a raise 35 feet, I think; from the top of that raise we ran a level west 62 feet, bringing the end of it out here, somewhere west of the manhole. There is, about 15 or 18 feet from the west end is in mineral. There was some mineral scattered along as it was being run, but it came into a solid streak of mineral which extended from 15 to 18 feet, bringing it back of the manhole. The relative position of the drift run from the top of this raise with the Equator, I took with a pocket compass, which might not be accurate, but it would bring it very near over the Equator level. At this point on the lower
109 level the manhole is, there appears to be a horse of country rock, but it does not appear in the level above. This lower level is connected with the discovery shaft by a raise 130 feet or about that, then connecting with the Gates shaft 52 feet, then running easterly 75 or 80 feet, then again by the wet shaft 44 feet, then running east on what is called the Thompson-tunnel level about 80 feet, connecting there with the bottom of the discovery shaft. The crevice found in the discovery shaft on the Colorado Central lode is the same lode in the Marshal-tunnel; there is also a connection with the Marshal-tunnel by a winze, the heighth of which I have forgotten—I think it is 80 feet; it can't be much more than that—then the level running west and another winze to the level from the bottom of the McCoy shaft, and so up through to the surface. I have been through that part of the workings. These workings out here to the east represent the workings from the Robinson tunnel. It is on the Colorado Central; it is called No. 5, east of that, but the same lode continued back from the Colorado Central. The vein has been traced out east of the Robinson tunnel 200 to 300 feet. The total tracing of the vein, I should think, about 800 feet east and west.

Question. About 800 feet. Mr. Hall, I will ask you to state how much ore has been taken out of the Colorado Central lode, if you know, in the various workings you have described.

110 (Which was objected to on the part of the defendant because not competent testimony to prove identity or title to the property.

Which objection was overruled by the court and the defendant then and there duly excepted.)

Answer. I cannot give the exact figures; approximately I should think it is very nearly $400,000.

East of that Colorado Central level and the Equator level there is nothing but crevice matter or lode material. I think it belongs to the same lode. These two levels are run between the same walls at that point. The general course or strike of the Colorado Central lode is south 42° west; east of that point it is about the same. The general course of the Equator lode I don't recollect only by seeing it here on the map. It is south 51° west. The scale on this map is 20 feet to the inch. From the discovery shaft on the Colorado Central to the discovery shaft on the Equator, it is about 120 feet; no, it is about 85 feet; that is, at right angles to the course of the lode, measuring about half way between the two discovery shafts. I have made an examination of all the surface shafts on the Colorado Central except the discovery shaft. I have not been through that. The top or apex of that lode or crevice is inside of the side lines of the Colorado Central lode. The workings of the Equator Company, their lower level at the point where it gets furtherest south, is about 25 feet within the lines of the Colorado Central, that is the 360-foot level, and I should have
111 said the 300-foot level is about 5 feet inside of the side lines, and in sloping up from the 300-foot level the slope is filled up, so we loose the workings, so that I can't tell where the mineral streak changes its course, but we find it here at this point dipping to the south or to the north in going up, and at that point there about from 3 to 10 feet within our lines.

On cross-examination GEORGE W. HALL testified as follows, to wit:

I was connected with the Tenth Legion at Empire, before coming to Colorado. I quit work on that in 1865. From that time until 1878, I was not connected with any mines. I did not say I was mining all the time. I said I had *been* more or less to do with mines. I can't say positively, but I think it was about a year and a half ago when I went underground in this mine. Most of the workings have been done since I went in there or took charge of the mine, that is, as far as the works are accessible. There were old workings that I have never been in, I could not tell how extensive. This level was run to about this point, just beyond this point from that point; well, this cross-cut I run, that level, these cross-cuts, started this level to the east, cross-cut there, cross-cut here, made this raise from this point up to there, sunk the Gates shaft from that point down, and run this level, cross-cut this level, run this green level, these cross-cuts, done this work here (above the Gates shaft) run this cross-cut and this level from about
112 (Thompson-tunnel level) or just beyond, west, run a cross-cut there, sunk this winze, sunk a shaft at that point. That is all I think in the way of levels, winzes, shafts, &c., that has been done since I commenced, as near as I can give it. I think since I have been in charge we have taken out from 30 to $50,000, and have spent on it somewhere between 30 to $40,000 *on it*. In speaking of the Gressenger level I say there is a vertical wall 60 feet on the north side. I mean mineral casing, not country rock. I did not mean to swear that I had a vertical wall 60 feet. I know where the north wall is opposite that point. We have a cross-cut run in at that point. I do not know where it is. When I speak of the south wall dipping to the south, I mean that was the wall or the casing of the mineral streak. I said it was 10 feet; I think I explained all that. From the manhole we run diagonally across the lode in a northwesterly direction. The character of the material run in was lode matter; it was soft gangue rock; I don't think there was any mineral; there was a horse of country rock right

there. It is not a fact that I ran to the west of that horse of rock, and went to the north of it; the fact is we ran right through it, very closely to 10 or 12 feet distant. We did not find mineral when we got through. The first mineral we found that I know anything about was right here at this point where it crosses the level that we ran diagonally across the lode; there is a mineral streak that crosses that cross-cut or level. I testified in this case on a former trial. I said there was mineral about 15 feet back from the junction. I mean it was east instead
113 of west. Taking a backward course from the manhole on the line we approached it; there was some mineral; the mineral was scattered; we come through soft crevice material with quartz. From the manhole back; from the point of intersection the mineral extended 140 feet, the other way it is about 50 feet; then there was a space of 190 feet without mineral; we followed a slip so far as I know; its position was perpendicular or inclining; the south casing has a dip to the north; from there we cross-cut through crevice material, lode matter; we ran by survey. We had it surveyed to get to a point directly under this point, called the Gates shaft. We were led to suppose that we were going diagonally across, simply because we were going across the crevice material, and not following it. I explain to you that the seams and slips and slickensides and everything of that kind runs with the course of the lode, and we went diagonally across. There is our deepest workings; there is a winze sunk there; that is the deepest. That level furtherest west is our 380-foot level. We followed a spur of mineral off that way. I say there is nothing but crevice material from the point where they are, the Equator & Colorado Central, the same lode west to that point where that cross-cuts here. That yellow tunnel near the Equator discovery shaft we call the Thompson tunnel. Can't say what the depth is. I have crossed there on the line of the tunnel many times. From the cross-cut where the two lodes are the same east it is about 40 feet. In the Thompson tunnel I don't think there is anything there but lode matter. I think the lodes are one
114 and the same at this point also. I can't say how far east it continues to be lode matter; the only point of junction I can fix is the two mineral streaks. I think I have stated this is all crevice material. I am not positive when I came through there. I started in at the mouth of the tunnel. I came through in these workings into the Colorado Central. I have been in there but once. I found it all crevice material, I think. This is the Equator and that the discovery shafts of the Colorado Central lodes, and all this being crevice material through here at this point and at that point and west, I take it to be all one lode. That would be the same lode, embracing the discovery shaft of the Colorado Central and the discovery shaft of the Equator, as far as I know. I arrive at the amount of silver taken out before I had anything to do with it in this way. I bought the ore of the Marshall Company. The reason I am more familiar with what was taken out before I bought it than after is that before I was at the mill, and since—I have been obliged to be on the mountain since that time. I think the amount stated as having been taken out was taken out from this point west. It all came to the mill in the name of the Colorado Central, and the parties owning this ground would not call it the Colorado Central, at least they called that the No. 5. We have been obliged to work at great 'advantage to keep the Equator folks from getting our ore, since the inspection commenced. They commenced to run that cross-cut ahead to get into that body of ore in controversy. Since I got that mine until the present

115 time we have had to work to great disadvantage is the reason why I have only realized *only* $50,000 from the workings. I don't know that it was—I don't know that it was richer before; I don't know but there might have been a greater number of men working there before. I don't know how extensive the old workings are, I have never been through them, and perhaps a large portion of the works are unsafe, and so I have no way to know how they worked the ground and the amount of mineral they worked. The Equator people cross-cut 54 feet and took out our mineral, and they have run several other cross-cuts there. There is one, there is another, there is another, there is another. Did they ever strike any vein that I had been in possession of? That lower one we were in possession from this line to there at the extreme west end. That cross-cut that I pointed out did not intersect a vein, but if they had found a vein there they would not have left it probably. We have not cross-cut into the Equator, not one. I said in my direct examination "there is a cross-cut into the Equator workings;" here is the cross-cut run into the Equator, a little past the center of their lines, but it was not run by me, or by my consent. We have, for certain purposes which may come up hereafter, run several cross-cuts; we have run one, two, three, four, five. In the former trial I testified that I ran from the Marshall tunnel to that point the entire level to the manhole there without taking any ore out. It was run by contract, and the same as this level run above here was run by contract, and
116 although they run through a fine vein of mineral there for 15 to 18 inches thick, but I did not look after it, neither did I look over at this point for the first hundred—well, somewhere from a hundred to 150 feet. In running the 400 feet I could not say whether they saved a sack of ore. I never saw one; could not say whether they saved any at all. The matter in that level is the same as in the Equator. After we holed through into the Equator workings, we took no mineral out of the lower level that I know of.

On redirect examination George W. Hall testified as follows, to wit:

They could not have taken much ore out of their level, because there was not much to take out. Westward from the manhole on their level there is no ore that I could see. I have worked this mine since the last trial principally, to a great measure, for developements. I have never taken a pound of ore that is inside of the Equator lines, or that has its apex inside of the Equator lines, so far as I know.

On recross-examination George W. Hall testified as follows, to wit:

I never to my knowledge took any ore out of any ore vein or measure that was opened, developed, and worked by the Equator as the Equator lode. Without regard to apex or side-lines, we have not taken out any ore out of any vein that had been in the possession of the Equator parties and opened and developed by them.

117 Plaintiffs counsel here offered in evidence the United States patent to William P. Linn, of the Colorado Central lode, dated July 21st, 1875, which was objected to by defendants on the ground that the evidence shows that the Colorado Central lode was upon territory of which this professes to have been discovered and patented, already occupied by the Equator lode; no discovery can be made upon ground already discovered and occupied. (Marked Exhibit A.)

Which objection was overruled by the court, and the defendant then and there duly excepted.

GENERAL LAND OFFICE.

No. 4420.] *Mineral certificate.* [No. 547.

The United States of America to all to whom these presents shall come, greeting:

Whereas, in pursuance of the act of Congress approved July twenty-sixty, eighteen hundred and sixty-six, entitled "An act granting the right of way to ditch and canal owners over the public lands, and for other purposes," the act amendatory thereof, approved July ninth, eighteen hundred & seventy, and the act approved May tenth, eighteen hundred and seventy-two, entitled "An act to promote the developement of the mining resources of the United States," there have been deposited in the General Land Office of the United States the plat and field notes of survey of the claim of William P. Linn, upon the Colorado Central lode, accompanied by the certificate of the register of the land office at Central City, in the Territory of Colorado, whereby
118 it appears that in pursuance of said acts of Congress, William P. Linn did, on the fourth day of August, A. D. 1874, enter and pay for said mining claim or premises, being mineral entry No. 547 in the series of said office, designated by the surveyor general as lot No. 261, embracing a portion of the southeast quarter of section nineteen (19), in township four (4) south, of range seventy-four (74) west, of the sixth principal meridian, in the Griffith or Argentine mining district, in the county of Clear Creek, and Territory of Colorado, in the district of lands subject to sale at Central City, embracing one (1) acre and fifty-seven hundredths ($\frac{57}{100}$) of an acre of land more or less, and according to the returns on file in the General Land Office, bounded, described, and platted as follows, with magnetic variation at fifteen (15) degrees, thirty (30) minutes east, to wit: beginning at the southwesterly corner of the claim, post in mound of stones marked "No. 1 & 261," from which the southwest corner of section nineteen (19), in township four (4) south, of range seventy-four (74) west, bears south eighty-seven (87) degrees fifty-seven (57) minutes west at the distance of forty-one hundred and ninety-six (4,196) feet. A rocky point on Leavenworth mountain bears north thirty-three (33) degrees west, and peak east of Comet lode bears north fifty-two (52) degrees east; thence from said post north forty-two (42) degrees east two hundred and ninety (290) feet to Leavenworth Creek, nine hundred and and sixty-seven (967) feet to
119 road from East Argentine to Georgetown, eleven hundred and forty two (1,142) feet to intersection of southwesterly boundary of survey No. 247, patented to the Marshall Silver Mining Company of Georgetown, with their claim upon the tunnel lode No. 5, twelve hundred and eighty-eight (1,288) feet to post No. 2, of survey No. 231, made for the Cayuga lode, fifteen hundred (1,500) feet to the northwesterly corner of the claim, post in mound of stone marked "No. 2 & 261," from which peak south of Clear Lake bears south twenty-three (23) degrees, thirty (30) minutes east, and peak of Independent mountain bears south (54) degrees forty-five (45) minutes east; thence from said post south forty-eight (48) degrees east, thirty (30) feet to intersection of southeasterly boundary of said survey No. 231, forty-eight (48) feet to intersection of southeasterly boundary of said survey No. 247, fifty (50) feet to the northeasterly corner of the claim, post in mound of stone marked "No. 3 & 261;" thence south forty-two (42) degrees west, four hundred and eighty (480) feet to road from East Argentine to Georgetown, twelve hundred and twenty (1,220) feet to Leaven-

worth Creek, fifteen hundred (1,500) feet to the southeasterly corner of the claim, post in mound of stones marked "No. 4 & 261;" thence north forty-eight (48) degrees west fifty (50) feet to the place of beginning, containing one (1) acre and *and* fifty-seven hundredths ($\frac{57}{100}$) of an acre of land, more or less, the same being exclusive of any portion
120 of the surface-ground hereinbefore described, which is embraced by said survey No. 247 as represented by yellow shading in the following plat. It being the express intent and meaning of these presents to convey to the grantee herein said surface ground, together with fifteen hundred (1,500) linear feet of said Colorado Central lode, to wit: thirty (30) linear feet northeasterly, and fourteen hundred and seventy (1,470) linear feet southwesterly from discovery shaft on said Colorado Central lode.

(Here follows diagram marked 120.)

121 Now, know ye that the United States of America, in consideration of the premises and in conformity with said acts of Congress, have given and granted, and by these presents do give and grant, unto the said William P. Linn, and to his heirs and assigns, the said mining premises hereinbefore described as lot No. 261, embracing a portion of the southeast quarter of section nineteen (19), in township four (4) south, of range seventy-four (74) west of the sixth principal meridian, with the exclusive right of possession and enjoyment of all the land included within the exterior lines of said survey not herein expressly excepted from these presents, and of fifteen hundred (1,500) linear feet of the said Colorado Central vein, lode, ledge, or deposit, for the length hereinbefore described, throughout its entire depth, although it may enter the land adjoining, and also of all other veins, lodes, ledges, or deposits throughout their entire depth, the tops or apexes of which lie inside the exterior boundary lines of said survey at the surface extended downwards vertically, although such veins, lodes, ledges, or deposits in their downward course may so far depart from a perpendicular as to extend outside the vertical side lines of said survey: provided that the right of possession hereby granted to such outside parts of said veins, lodes, ledges, or deposits shall be confined to such portions thereof as lie between vertical planes drawn downwards through the end lines of said survey, at the surface, so continued in their
122 own direction that such vertical planes will intersect such exterior parts of said veins, lodes, ledges, or deposits; and provided further, that nothing in this conveyance shall authorize the grantee herein, his heirs or assigns, to enter upon the surface of a mining claim owned or possessed by another; to have and to hold said mining premises, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said William P. Linn, and to his heirs and assigns forever, subject nevertheless to the following conditions and stipulations: First, that the grant hereby made is restricted to the land hereinbefore described as lot No. 261, with fifteen hundred (1,500) linear feet of the Colorado Central vein, lode, ledge, or deposit for the length aforesaid throughout its entire depth as aforesaid, together with all other veins, lodes, ledges, or deposits throughout their entire depth as aforesaid, the tops or apexes of which lie inside of the exterior lines of said survey, but subject to the right of other parties to follow any other vein or lode, with its dips, angles, and variations legally held under a location made prior to May 10, 1872; second, that the premises hereby conveyed,

with the exception of the surface, may be entered by the proprietor of any other vein, lode, ledge, or deposit the top or apex of which lies outside of the exterior limits of said survey, should the same in its downward course be found to penetrate, intersect, extend into, or underlie the premises hereby granted, for the purpose of extracting and removing the ore from such other vein, lode, ledge, or deposit.

123 Third, That the premises hereby conveyed shall be held subject to any vested and accrued water-rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches & reservoirs used in connection with such water rights as may be recognized & acknowledged by the local laws, customs, and decisions of courts. Fourth, That in the absence of necessary legislations by Congress the legislation of Colorado may provide rules for working the mining claim or premises hereby granted, involving easements, drainage, and other necessary means to its complete development.

In testimony whereof I, Ulysses S. Grant, President of the United States of America, have caused these letters to be made patent and the seal of the General Land Office to be hereunto affixed. Given under my hand, at the city of Washington, the twenty-first day of July, in the year of our Lord one thousand eight hundred and seventy-five, and of the Independence of the United States the one hundredth.

By the President: U. S. GRANT.

(SEAL OF GENERAL LAND OFFICE.) By D. D. COVE, *Secretary.*

Recorded vol. 16, pages 319 to 324. Examined.

L. K. LIPPINCOTT,
Recorder of the General Land Office.

Recorded August 14th, 1875, at 12 o'c. m.

H. A. SPRUANCE,
Recorder.

124 Plaintiff's counsel offered in evidence a deed of one-half of the Colorado Central lode from Wm. P. Linn to George W. Hall, and marked "Exhibit B";

Which was objected to because there is no title in the grantor from the United States. The government cannot grant land already occupied; parties must show they have complied with all the laws;

Which objection was overruled, and the defendant then and there duly excepted.

Plaintiffs here offered in evidence a copy of a deed of one-half of the Colorado Central lode from Wm. P. Linn to Charles H. Marshall, which is marked "Exhibit C," and affidavits on file with the clerk of the loss of the original;

Which was objected to for the same reasons as to other deed;

Which objections were overruled by the court, and the defendant then and there duly excepted.

Plaintiff's counsel, to further maintain the issues in their behalf, here offered in evidence a transcript of the district court of Clear Creek County, showing that prior to that issue of the patent by the government, that the Equator Company brought a suit against the Col-

125 orado Central parties, wherein they claimed that the property sought to be patented by the Colorado Central folks was really the Equator lode to show the institution of the suit and the result of it, marked "Exhibit D";

Which was objected to by the defendant, because a judgment of nonsuit is no adjudication, nor is such matter that can be put in evidence before a jury;

Which objection was overruled by the court, and the defendant then and there excepted.

The plaintiffs, to further maintain the issues in their behalf, here introduced the witness, General FRANCIS L. VINTON, who being duly sworn, testified as follows, to wit:

I am a civil and mining engineer; have been for about 20 years. I have been connected with mining in this State two years; I have made the subject of mining my constant study. I have made examination of the properties in controversy in this case—the Colorado Central lode. I examined all these workings in the Colorado Central that develop an ore chimney, or ore streak, or shoot that passes from the discovery shaft near the debris, as I presume, to the bottom of the Gates shaft. I will explain all I know of these workings if you would like me to be more explicit. Along at the bottom from the
126 Gates shaft, 450 feet from the Marshall tunnel, horizontally, is the Wallace stope, when I passed over into the Gates raise; these I can describe more fully by the lines of the diagram. I pass into the stope, and from there into the Gressenger level; I see one of the veins developed there which I consider traceable, logically traceable, from below, and from there up the Gressenger stope, and passing over we see the vein again I speak of in the level. Passing over into the Gates raise once more, and from there up into the Gates level, where I distinguished three veins readily; and from the Gates level, 26 feet up above where the Gates level runs both east and west, 26 feet above that is a level running east, from which is run a cross-cut connecting with the Bell shaft I see three veins, and 26 feet higher, to the wet shaft, where I see four veins in a cross-cut from the foot of the Gates shaft. From the top of the Gates shaft, as I pass to the east, and arriving at the foot of the west shaft, there I see three veins. Passing to the top of the Thompson-tunnel level, as it is called, I have seen three veins, which I have delineated as well as I can, representing the facts fairly on that line. In the first place that map shows the discovery of a thorough fissure vein.

127 I have made here a sketch to a scale of 10 feet to the inch, to represent*ed* fairly before the jury the result of my inspection of the workings of the Colorado Central. This whole section here is a vertical section, made upon a plane which is passed directly through the ground, and which is known as a fissure in the earth's crust, which is pretty near, and essentially a vertical lode, and of which the north wall is essentially vertical. This line of intersection that you see here showing the entire connection, not simply in the prospective or superficially but actually as pointed out, being the projected lines of the shafts. These shafts cannot be taken in the same cross-section; that is, the wet shaft, Gates shaft, and raise below; therefore I have rendered on this projection all these shafts and the result of this cross-section. I have all these three veins. I see I have represented here in the cross-section the position of these several ore-streaks that we have been speaking of, although this streak here and this streak there would not appear upon a vertical section; but if this be considered down through the wet shaft they are there, and the strike would be determined right there. I want that understood, that although I claim it to be a cross-section, it is not taken at one place; but I have rendered the projections. It is traceable, as I said, and

just as much by this drawing as that. I have drawn here in
128 blue, what we call the country; it is a gneiss rock. There is not a vein in the three northern counties, Gilpin, Clear Creek, and Boulder Counties, but which contains and are the same in structure of the fissure in these gneiss rocks in the upheavals of the Rock Mountains, which has been fissured mainly in a vertical position, and may show rock on one side, and the other not different in their construction from the nature of the vein filling on both sides. You see it has no wall on the south side of the Colorado Central. I am informed they had a wall on the south side of the Equator, but I have not seen the spot in the cross-cut. Here I admit the north wall of the Colorado Central, and I know it there. The vertical wall is intended as the north wall. That is the gneiss rock. The north wall is in the cross-cut to the north on the Thompson tunnel, and I understand they have a north wall in other cross-cuts here, which are represented on the map. That passes into a rock that is on the junction of the north wall and crevice. There is the north wall, the yellow one, (indicating on map). There is country rock most emphatically, just like that I have got there. I see in it features of the ordinary wall rock; it has the features of the north wall. Now at the face of two or three cross-
129 cuts to the north, which are represented in the projection here, which becomes larger in its structure; it has crystals of quartz, crystals of feldspar, containing large bunches of *mica* and conglomerate, and showing it is on the junction, on the contact between the vein matter and the country rock. It is according to my experience—I have myself in the study of these veins and similar veins in the East, and the expressed theory of the books are nothing but kaolin. Now, starting from here these lines which I have drawn in red represent the ore streaks from which I have taken specimens and will exhibit if necessary *so* to do so. A little further these rocks which I have assumed here—I don't know exactly the distance—between 40, 50, and 60. We had these rocks which is ordinary in the veins of this country, which are in the northern counties, and which are mostly dikes filled with country or porphyritic rock composed of feldspar, quartz, talc, and has its name in the books. There is, as has been expressed by one of the witnesses, a wall, not a country wall, but a smoother wall or slickensides which occur in most every mine. There is which may be called a vein wall, or ore-vein wall, if you choose to call it, of the ore which is argentiferous galena, sulphides of silver, some very rich and with ruby silver in what is called the
130 gangue of quartz. There we have in the gangue trap rock and wherever country rock has broken off and *follow* into the vein we call that a horse. In this case the walls are on each side of the same rock. In true fissure veins there may have been a slip of one wall, so that in the case overlying the gneiss rock, and one or the other side has slipped, might bring the lime rock in the face of the gneiss rock, but it is not so in those counties we are speaking of. At Golden, we encounter lime with gneiss rock underneath, but up here the whole country is gneiss, which is easily distinguished from the vein filling. Then I say that at this point upon this level as represented here, projected upon this paper, and supposed to come in this direction, is the 380-foot *in this direction, is the* 380-*foot* level of the Colorado Central, and there is another one that corresponds on this side to the Equator, but I have not treated of these workings at all.

Passing through the Marshall tunnel perpendicularly to the plane of that paper until we arrive at about 450 feet, I think it is, there is the

Gates shaft; at 50 feet this side—that is, at 400 feet from the Marshall tunnel—there is what has been called the manhole; that is where the works of the Colorado Central and the Equator break into each
131 other almost by necessity, with a cross-cut of not more than 8 feet. And then 350 feet on, something like that, that cross-cut there—but I will speak of that other point first, at the Gates shaft. At the Gates raise this streak here is invisible, and another one close by the shaft, in the rear of it—I don't remember it is represented here or not; I suppose that it is. Well, that streak is found there, as you will see at the Gates shaft, passing nearer. This one is found in the vicinity of the manhole, which is 50 feet to the east of the Gates shaft, and facing this through there. Still further east it is found in the raise, a little drift running away from it to develope this vein, which is called the intermediate vein. At all events, this section is near enough to these two veins; they are near enough together, running back towards the wet shaft, to enable me to justify in considering this section as passing through these two veins. Now, passing up the Wallace stope, passing from here up over the Wallace stope, at the same time—one prefers he can go off the shaft here, passing up over the stope—we find this vein showing every day; and it is the prolongation of this one, as we suppose, because it is the same distance as here, and is evidently the prolongation of it; it is not this one passing from the stope, as I am told. And going up here and walking into the Gressenger level, which runs east and west, the one to the west is a stope, stoped out to the east, the vein continues in the vein in a drift, being the same vein as to the west,
132 and in this drift there are two cross-cuts one of which connects with the Bell shaft. This stope on the west is represented here, and the vein passes up, yet one can distinguish in passing up; it, in passing up through the flow there—that represents the flow of the ores—passing up through the winze to this level development, not of very great extent, but enough of it at all events to show the course of the vein, and this brings us to the Gates level, which runs east and west, with cross-cuts here which connects with the Bell shaft. This vein is stoped up there 26 feet above. Now 26 feet above the Gates level we have a level, and that runs east and west—yes—no, yes, that runs east, at least it is stoped west. There is a lode stoped to the west. There is a cross-cut there that passes over, not very far, but far enough to reach a vein said to be known there that I have not seen. This one connects with the Bell shaft; this cross-cut runs over and connects with the Bell shaft; I saw that connection, but it is more or less barricaded that I did not see the streak; I don't know about that nor do I know of it here where it is said to be stoped in the Equator. Passing 26 feet further up and crossing to this level we have a cross-cut which has a winze at this point and goes further on about 15 to 18 feet, and in this cross-cut; that vein, these four veins that
133 have been spoken of. That I could see in this one I am speaking of. There is the winze there. That is a winze about 17 feet, and at the bottom of that ore one can see that vein. Here is the top of the Gates shaft and raise, and it is called the 180-foot level, this is 10 feet and that 140 feet and then raising here we pass eastward about 60 feet and that brings us to the foot of this wet shaft itself in which we follow the vein to the top of the wet shaft; at the top I see these two veins right near the shaft, and then that is in the Thompson-tunnel level. You pass from there to the eastward 75 or 80 feet and arrive at the bottom of the discovery shaft. There I can see the vein,

and that vein in the projection and cross-section, that they have there; I was able to trace three ore-streaks in the Colorado Central workings well for 200 feet; that is, 180 feet off of 380 feet the depth of the 380-foot level, I can trace for 150 feet I trace three veins down from there to there, on this level alone; I have been able to distinguisg four ore-veins. There I can see it down there, and over here I have not been able to see it, and here, because it belongs to the Equator workings; I have drawn the map showing places where I cannot testify to because other parties can speak of them; I recognize that there and this near the Gressenger stope; I distinguished the one continuous vein from this point to this point, and I suppose that this one is continuous up to
134 the Gates level although it has not been traced up here. These red lines, that is, excluding the one to the south, and including all below the 180-foot level, they show ore or ore-streaks. This ore-streak to the extreme south are shown by cross-cuts which breaks into the Equator stope. That is a connection of the Equator shaft that breaks into the Bell shaft, and that, I understand is in an Equator stope; but I have only been told that; I have not seen that. I recognize four views on that cross-cut, an ore-streak is only one of the elements of a vien or lode. I will give a little idea of the constitution of a true fissure lode or a true fissure vien: A fissure vien is one that ordinarily breaks through the country rock—a stratified rock usually—and you can see as many illustrations of it every day if you will go up in any of the northern counties, Clear Creek, Gilpin, and Boulder, and other places, and if you notice, the gneiss rock is split down vertically or across the strata with a whitish vein in them, you distinguish two kinds of rock, and anybody can see them who pays attention to those things. Here is an ideal cross-section of a true fissure vein; but it is correct, and I have never in all the books I have studied, saw one thing laid down there that I have not seen reduplicated here in Colorado, in the north three counties, and are well settled, even in the typical
135 viens; true fissures they contain these ore lodes, not very large nor are they at any particular place in the lode, but they are rich in the precious metals, and there are ore-streaks only extended to parts of the vein; and this cross-section will give you some idea how they are distributed through the vein. It is so from time immemorial. As to this course I know it only so far as it has been opened. There is a piece of rock that has fallen in, and the ore has circulated around it, because it can't go through. Ore veins are formed inside of the lode, a lode is between walls of country rock. There is another peculiarity about the true fissure vein which has always been understood by the miners in this State, and that is in regard to the general width of our lodes. I remember when I came here two years ago, I noticed in a number of mines the parties continued on the ore-streaks, because these ore-streaks had smooth walls. They used to say, here is one wall, and would not think of going outside to look for ore, nor would they spend a dollar to do so, scouting the idea. I have seen the best workings on the ore streak by a cross-cut tunnel. Within the last few years they have commenced work in the mines where apparently there was nothing there of the kind, that had never a cross-cut run, and by running a cross-cut would find various ore streaks and that is the way it runs in all lodes, playing out, resuming and
136 continuing on, and that is well known in practice. Another principle, and that is the sides of the lode or the walls of the lode, we assume between the porphyry inside of the lode and the gneiss rock. It is a fact a miner has no lode, and he thinks he has no more ore;

he thinks it has run out and thinks he has been deceived into going into these old works, while by running a cross-cut he might run through what he thinks is a wall and get out of it thousands and thousands of dollars of as good ore as ever came out of it. So it is known that a lode carries several ore streaks, the majority following on the walls. There is no particular theory about it, and no particular effort required to remove that ore that is on the contact after that vein is exposed by cutting out this rock which appears like a wall. That is another vein, and here you are looking at the flat side of the vein in this section. The ore is distributed in the vein in a peculiar manner looking at that point. That is precisely what we see by looking through the workings in the Colorado Central lode. There is another general fact known to science, and that is illustrated by the Colorado Central perfectly well. If you take a side view of it you will see that the ore does not pass all the way through; it is not scattered all the way through in the vein, but it is in ore-shoots, not particularly in true fissure veins, but it is a prin-
137 ciple laid down and given in the general description of veins, and where particular veins are described merely these are the simple details which are to be drawn, and perhaps mere application that I have represented there. The ore-shoots generally quarter away. That represents the surface of the ground and starting down, considering this a porphyry filling, gangue ore. You will find the mineral chutes in that position, in shoots, that is, found broken. You will go down in the chute in the ore; you will get out of it; you will pass out of the ore; and, as you know, you may come into it again. When you pass into the barren region you drift to find it; you drift and you will get into ore again; and off here into another chimney, and that is so well made out there is not a mine hardly but what has got its matter distributed that way. And, in the case of the Colorado Central, that is the reason why in this place out here, in this projection extending down the same way, looking sideways with the vein, and up here, I suppose, there we have the ore-shoot quartering off northerly, is found there, here and there (witness takes pencil and traces the general course of the ore-shoot followed from the whim shaft to the west and down to the Marshall tunnel) be drifting this way you will observe it has come into ore again, getting out of ore and getting into it
138 again, which has something of this direction, and, as I believe, found up here; again, I draw these facts, not that I can swear to them at all, but others say they can. I made a personal examination above the 140-foot level. I was in some of the old workings in this cross-cut; when I say old workings I don't know how old they are. I consider from this point down to this that I examined them. I went into some drifts alone. I did not go into the Equator workings, because I was refused admission. That section between the blue wall rocks represents the Colorado Central lode—represents one lode. With regard to the wall: here is the face of the mountain, there is a shaft, here is a level, and that a winze—a shaft joining two levels. That is the way they stope out at the bottom along the drift. We start from here; the rock is taken away and the waste is packed back so that the workings would appear like that. That is a mill hole down which the stuff is thrown and saved, and the waste is shoveled back into the stopes. And from here they leave one point and walk over the stope, as I spoke of going over the Gressinger stope, and that is the most economical way to get out the ore. The top or apex of a lode is where it comes to the surface of the ground—the intersection of where it is in place. I have been informed that there has been an erosion along the top of

139 this lode; but this has no bearing on these questions; some lodes stand higher than the surface by reason that the erosion has carried adjoining surface away, and the top of that is the apex; but there are lodes that don't come to the surface, but are lodes filled with porphyry more or less, as right along here; but the highest point is naturally the outcrop of that lode, as much so as if it come to the surface. The words top or apex are synonymous with the word outcrop. Then it makes no difference because one point is higher than another. It is a mean, frivolous consideration, when compared with the body of the lode, to consider such a point as that the outcrop. I would consider the outcrop all the way between, because it is a lode; the whole business in the lode; the lode is not here nor there; the lode is the whole body. There is no question about that definition. If the north rim is further up it would be the highest point. I only speak of this as a probability as the ground is covered up. I made that drawing. That up there that has not been explained is a larger section on a double scale of this stope, which is the Gressenger stope. It appears that in following this ore-vein up, for certain reasons and the hurry to make a connection here, left a roof rock, and which covers up the vein; and it was to show the vein, that the vein is visible there, and show a reason or possible discontinuity there. It is evident that
140 it was there. These dark colored bodies are the same as on the other map. These are levels crossing to this; this level here is that level, and that level there is that one; they are connected out there perpendicular to the plane of the board. The scale on that map, is taken from surveyed measurements. I think we may look at some of these specimens. The country rock is this rock, the stratified rock. That is gneiss rock, block mica, and then this represents the ore, the veins we cut through. These are the walls, they are distinct from the crevice matter which is a soft stone, talcose, and has no mica in it. Now here is a specimen of ore, of the ore veins; there is a part of the smooth side; it makes a slick'nside, or what is called the wall of the lode itself by some of the witnesses. That comes off the porphyry filling, quite smooth, so that where in drifting along without the vein you have one side a wall, perhaps some feet through, smooth on both sides. I don't wonder the boys always call it a vein, but so long as porphyry rock, no matter how smooth it is, it was not the termination of the lode or near the end of the vein. That is slickensides with evidence of movement there. It has been apparently striated in this direction, it is common in all mines. That side is more polished than this, but this is a local strain, local movement, and it is hard to tell how much
141 of a strain has been given to it. That is from the cross-cut of one of the walls, with walls as smooth as that; the miner says he has got his walls, and thinks he has got on it, until he learns by cross-cutting that the veins are not developed. These specimens are from the Colorado Central lode. That gives an idea of a little vein in a large one, and that is the way it lies in the porphyry and continues to follow the gneiss or country rock. Every man that travels in the northern countries, who has his eyes open cannot fail to observe the distinction of the vein from the country rock. As far as my examination has gone, it is crevice matter; this is entirely crevice matter between the of the lines Colorado Central, between this point and that one in all crevice matter, and although the lode itself may extend beyond, there is no mistake that the lode merged from the Colorado Central patent. These two lines are intended to represent the side lines of the Colorado Central; this is south projected. I say I don't know how wide north

and south this lode is here, but I say it is all crevice matter between these two lines. Longitudinally and horizontally it covers from here to here. I take it for granted, that this map is introduced as authentic, and therefore from here to here as far as I know, to there, is the
142 extent of the lode; well, that may be 50, 150, or 200 feet or so. I state from observation.

Question. Taking your observations to be correct, that there is the apex of the lode from the discovery shaft to the point to which you extended your observations, and taking it for granted as stated, the Reed shaft is on the lode, where would that apex be of that?

(Which was objected to by the defendant, because he is trying to prove something not proved.)

Answer. If there is a lode found in the Reed shaft, I presume it to be the extension of the lode known as the Colorado Central, and that the outcrop is on the Colorado Central plat, and this same reason would apply to the Harris and Reed shaft, because I see the general direction of this lode is in the extension or prolongation of the Colorado Central plat, and I know that these lodes are sometimes a thousand feet long, straight, so I presume it would be one and the same. It has never been proved in the first place that this vein, the Colorado Central, intersects and crosses the Equator, or that the latter intersects and crosses the vein which is the Colorado Central, therefore I don't know whether you call them two veins.

I simply call this a spur or branch of that mineral; but certainly in the Marshall tunnel here at this point, between this opening in the Marshall tunnel, and the level which is run by the Equator, and
143 here, which is the north wall of the Square and Compass lode, which I suppose is the south wall of the Colorado Central lode, is country rock; there is country rock, and a vein may have passed in this direction. This is a part of it. That is a part of it, Compass and Square, the same vein that the Colorado Central is. That makes it about 40 feet wide; between the two is about 40 feet of country rock, and in these tunnels it is the same thing. I don't doubt there is country rock, and these two veins separate, call it one or two as you please. When I was in the Kirtley tunnel it was not affirmed that the Colorado Central was actually made out. I would have to take it from the map because there is no connection with the Colorado Central. The Equator is connected with the Kirtley tunnel; the Equator lode is made out in the Kirtley tunnel, but if I take this distance in here, that would be 200 to 250 feet. I call it country rock between there. I could tell where these two veins would come together reasonably, or become one going west. I have been through the Thompson tunnel; there is country rock there; there is crevice material all through here. At this point, 380 feet in depth, there is crevice matter; at that point to begin with, all the way through. It was barricaded there. I believe it is admitted;
144 through there, of course, it is a continuation; that this crevice matter, that is 380 feet below the surface, and that is 200 feet below the Thompson tunnel. Here is the end line of the Colorado Central right there, there they come together. There is country rock and they may be together 200 feet below a point, the junction here. It is about 75 feet east of the Colorado Central end lines (witness marks junction I); of course I have not seen the junction, but I would like to answer as near as I can, giving something definite.

On cross-examination General Francis Vinton testified as follows, to wit:

That vertical section is one located from the east to the west. The

east end line on this map is up there. That is the discovery of the Equator, and there is the east end line of the Colorado Central. These dimensions are by actual survey; the walls are surveyed at two points, found at two points, there and there; the junction between the two is logical. We made two points by actual survey. I conjecture or argue from these points where the walls are; they are not ideal; they are from conjecture. I have seen the south wall at this 180-foot level in that cross-cut there; I have seen it in these cross-cuts here, levels. I hardly think it is the south wall, but it looks like country rock
145 or horses. There is a length of 150 feet projected in length on the strike. These here are carried back towards the west about 80 feet. This lode here—that one is brought forward about 50 feet. The others can be obtained in that section through the wet shaft. That dark line in the projection of the Bell shaft, that is the workings of the Equator. The point of intersection I cannot swear to. I don't think I have actually seen the point of intersection there that you are pointing to of those two veins. I do not care to say whether there is or is not a point of intersection there that I have seen. On the strike of the lode what is demonstrated on the vein? Well, I will start at the bottom. This vein here is to be demonstrated to be about 40 feet on the lode, along. That is 80 feet off from where it is represented. This lode here which follows in the raise, which is 40 feet this side of the manhole and 30 feet high, prolonged in the drift about 60 feet; that I consider about 60 feet there, the Gressenger level; then passing up—that is really developed more than that, because I see that in the Wallace stope, which I think must be on the west 50 feet. The Wallace stope is entirely on the west of the Gates shaft, and I guess it is fully 50 feet long. Between here and there I have seen no stope that I know of. I
146 just went up the ladder and I found this vein at that point there, and in the Gressenger stope to the west of the Gates shaft, and I will give 50 feet of development there. Here I have in the Gates level a development both east and west, a vein, and I will put that vein at 50 feet on each side. Here I have a development east into this level, which runs out in this direction of perhaps 40 feet, and here the distance between the top of the Gates shaft and the foot of the wet shaft makes a development of 60 or 65 feet, something like that, and from the top of the wet shaft to the bottom of the discovery shaft is another developement of 75 feet. I find that all the way through the longest continuous vein on the strike of the lode I think is at the Gates level, I think 100 feet in length. I say at this point here there is, from the top of the wet shaft to the foot of the discovery shaft, there is a distance of about 78 feet, and that is the development in that direction; that would be 78 feet long. From the foot of the wet shaft to the top of the Gates shaft, going in the same direction to the east makes another developement of 60 feet long. I can't add up all in my head. There is a developement of 140 feet from the Gates shaft eastward. It is a good vein, continuous the entire distance, carrying mineral. It varies from one to two feet. In the lower workings it did not seem to me to be quite so good as in the upper ones; from here to here there is a good deal of ore being stoped and worked. These ore-veins are excellent on
147 this level, which is 26 feet above the Gates level; below here at that vein north of the Gates level I would give a foot; this vein is a little thin; perhaps 6 inches, to the same way as that—the point of intersection—I hardly make that out below them; I suppose the point of intersection—I don't know exactly what it is in. The Wallace stope, where I could see the vein, it run ten inches. I have only shown two veins

here uniting. This vein the continuation of it has not been made out behind here. It has been stoped; there is none here vertically above; that is in the vertical plane of it, and where an intersection of these veins goes down, I have every reason to believe, though, I have not seen them, there is a cross-cut that goes to the country rock; it gets to the country rock about 80 feet from here; well, say there (points), that line is all conjectured. I don't say that is the cause at all. The best ore-streaks occur on the contact pretty nearly uniformly. I mean by contact that point where the vein matter lies upon the country rock. I believe it to be a fact that there is more continuous ore and greater continuity when they occur in the lode on the wall than in the body of the lode. I have always learned that from the books; I don't think that it is greater as it goes down; no greater in going down, continuity; greater in going down in the body of the lode I think is likely.

148 There is always an ore-streak between the wall and zone; sometimes it is clayey porphyry against the wall. You don't always find the ore-streak sticking on the gneiss rock. There are none of those ore-veins followed by the Central lode upon ore directly upon the wall or country rock. This cross-cut is perhaps 10 feet of the wall; it is about 10 or 15 feet from the wall. All these veins that I have delineated and testified to occur on the contact; that is just where it does occur, the zone of country wall and the vein matter. I testified that this wall was gneiss, where the vein material lies upon the gneiss rock. I do not call that the contact of the wall and the vein matter, because the brow is between the porphyry and lime. The contact there would be where the crevice material comes in contact with the gneiss rock. The end of this cross-cut here, I would say, is in country rock. I don't care what the distance is between country rock and the crevice. It would be ten feet.

The plaintiff, to further maintain the issues in their behalf, here introduced the witness ALBERT JOHNSON, who, being duly sworn, testified as follows, to wit:

I am a mining engineer; I made this large map. That was
149 the result of the joint survey. I know the premises described in this patent. This is the east end line of the Colorado Central lode, 50 feet across. That is the north side-line, and that is the south side-line. The west end-line is not shown; it extends beyond the map. I am familiar with that lode. I have made surveys in it quite frequently for the past year. The top or apex of that lode is at same points. The apex of that lode is probably wider than the ground patented by the Colorado Central lode parties, to the highest extent to the north of it, and the lowest to the south of it. The patented portion covered part of it; at the whim shaft it covers a portion of it; the apex, a portion of it, would come within the 50 feet, I should say, the width of the patent. I have examined the Marshall tunnel, but am not familiar with the Kirtley tunnel. I have seen it in the Robinson tunnel. In the Robinson tunnel I consider it a different lode from the Equator. In the tunnels they are divided, with country rock between. The 360-foot level of the Equator enters the side lines of the Colorado Central from the south at this point, and continues within the side-lines up to this point. Measuring along the line of the patent, it would be about
150 200 feet. The 360-foot level enters the side-lines at this point, and leaves at that point, distance of about 75 feet. There is a cross-cut running from the 360-foot into the side-lines of the Colorado Central patent. There is one from the 360-foot level; another one at

this point from the same level; and another at that point from the same level—300-foot level. From the 300-foot level there is one from that point, and another one at the point; that makes five altogether. The cross-cut from the Equator 360-foot is about 25 feet inside of the Colorado Central patent. These cross-cuts run about on a level. These drifts go in on a horizontal. There is one shaft running from the Equator into the Colorado Central called the Bell shaft. The 40-foot, 80, and 120 foot levels testified to here are not marked on this map. There are three levels said to be on that lode that are not on that map. They would pass through this shaft to the east end west. I speak of the levels on Colorado Central, levels from the discovery shaft. The 360-foot level of the Equator lode is 25 feet at the furtherest point inside of the side-lines of Colorado Central lode. The lines of interference with the Equator survey and Colorado Central survey—that is, the intersection of the 2 north lines—that would be the same; that would be
151 one intersection of the two south, and here the other (marked with crosses). It makes a lozenge-shape piece of ground. I made a mistake at that point. This is the point, commencing at this point; thence south 54° east 241 feet; thence south 42° east 239 feet; thence north 54° east 241 feet; thence north 42° east 239 feet, at the place of beginning. These are the bounds of this lozenge-shaped piece of ground. That is the point I started from—the east intersection of the north line of the Equator and the south line of the Colorado Central. A portion of the Bell shaft of the 360-foot level, and a cross-cut from this point, and a cross-cut run from the 360-foot level at this point, are the points entered into of this lozenge-shaped piece of ground.

On cross-examination Albert Johnson testified as follows, to wit:

I said it was my opinion that the top or apex of this lode was wider than the Colorado Central patent. I think some of it lays both to the north and south of patented lines. I don't know exactly how much lies to the north, but there are cross-cuts in some of the workings showing that north side of the lode is north of the patented ground;
152 don't know exact distance, about 10 or 15 feet. I have no means of knowing how much of the top lies south of the south line of the Colorado Central patent. I made that map. I didn't survey the whole of it. The Bell shaft is on what is known as the Equator lode. I think it is on both the Colorado Central and Equator; at the bottom it is within the lines of the Colorado Central; at the top it is on the Equator. It is on the same lode, the Equator. The horizontal projection represents the Bell shaft, about 65 feet, that is its departure going down. I mean the amount of northing it has got in its depth. The sinking of the shaft has given the northing. I follows the crevice material. There are places where it follows a wall. I could not examine it. Where I did examine it, it followed the wall in some places; don't know whether it is the south wall or not. It might be termed a slip or casing, a portion of it. It is not country rock, that I am aware of. I think the top of that is on the same lode as claimed by the Colorado Central. The Bell shaft is back on the south side. I think it extends about 23 feet south of the south side-line of the Colorado Central. I do not know it to be as wide as to the south side-line, because I don't
153 know what the Bell shaft is on. Taking a line at right angles with the Colorado Central patent, from the south side-line, I can trace what I call the apex about 75 feet. The average dip of the Bell shaft is about 15°; its depth or length on its course is about 290 feet (witness points out discovery shaft of the Equator lode). I was in it

some time ago, about 50 feet deep. Never been to the bottom of it. I haven't got the northing of it. That is beyond a depth of 50 feet. The engine shaft is at this point. I have surveyed that shaft. The 360-foot level went in within the surface side-lines of the Colorado Central patent, carried down vertically on the dip of the crevice.

On redirect examination witness Albert Johnson testified as follows, to wit:

The plaintiff, to further maintain the issues on their part, here introduced the witness, JOHN LONGACRE, who, being duly sworn, testified as follows, to wit:

I am a miner. I know where the Harris shaft is, but don't know where it is on the map. I know what they call the Harris shaft. I helped to sink it 25 or 26 feet; it was from 12 to 14 feet through
154 solid slide, and about 12 to 14 feet on the vein. We had crevice material or lode matter in the bottom of it. The shaft was about 8 feet long and 4 or 5 feet wide.

On cross-examination witness, John Longacre, testified as follows, to wit:

There was no mineral in the shaft. There was what you call the gangue. No walls. Shaft was about 25 or 26 feet deep; we had got only 12 or 14 feet down after going through the gravel.

Plaintiffs' counsel, to further maintain the issues on their part, here introduced all the maps and tracings and specimens marked Exhibits "F," "G," "H," "I," "J," "K," "L," "M," "N," "O," "P."

Plaintiffs, to further maintain the issues on their part, here introduced, in evidence to the jury, the patent of the United States of the No. 5 lode to the Marshall Tunnel Silver Mining Company, marked Exhibit R, which is in the following words and figures, to wit:

155 And the defendant, to maintain the issues, on its part, here introduced, in evidence to the jury, the United States patent of the Equator lode, dated April 18th, 1876, marked Exhibit "S," and which is in words and figures, as follows:

GENERAL LAND OFFICE. No. 1752.

Mineral certificate No. 680.

The United States of America to all to whom these presents shall come, greeting:

Whereas, in pursuance of the provisions of the Revised Statutes of the United States, chapter six, title thirty-two, there have been deposited in the General Land-Office of the United States the plat and field-notes of survey of the claim of the Equator Mining and Smelting Company upon the Equator lode, accompanied by the certificate of the register of the land office at Central City, in the Territory of Colorado, whereby it appears that, in pursuance of the said Revised Statutes of the United States, the Equator Mining and Smelting Company did, on the second day of November, A. D. 1875, enter and pay for said mining claim or premises, being mineral entry No. 680, in the series of said office, designated by the surveyor-general as lot No. 522, embracing a portion of section

156 twenty (20), in township four (4) south, of range seventy-four west of the sixth principal meridian, in the Griffith mining district in the county of Clear Creek, and Territory of Colorado, in the district of lands subject to sale at Central City, containing one (1) acre and forty-two hundredths ($\frac{42}{100}$) of an acre of land, more or less, and according to the returns on file in the General Land-Office bounded, described, and platted as follows, with magnetic variation at fifteen (15) degrees thirty (30) minutes.

Beginning at corner No. 1, a post in mound of stone marked "No. 1 x 522," from which the northwest corner of section (19) nineteen, in township four (4) south, of range seventy-four (74) west of the sixth principal meridian, bears south eighty (80) degrees twenty-seven (27) minutes and fifty-one (51) seconds west, at the distance of four thousand seven hundred and twenty-eight (4,728) feet, Independent mountain bears south sixty-two (62) degrees east, and peak south of Clear Lake bears south twenty (20) degrees east; thence from said post No. 1 north fifty-four (54) degrees east two hundred and thirty (230) feet to wagon road from Snake River to Georgetown, two hundred and forty (240) feet to intersection of northerly boundary of survey No. 260, patented to Bela S. Buell, with his claim upon the Urunsell lode; four hundred and ten (410) feet to the intersection of northerly boundary of survey No. 261, patented to William P. Linn, with his claim upon the Colorado
157 Central lode; five hundred and twelve (512) feet to intersection of westerly boundary of survey No. 399, made for the Gates lode; six hundred and thirty-three (633) feet to intersection of southerly boundary of said survey No. 399; six hundred and fifty (650) feet to intersection of southerly boundary of said survey No. 261; eight hundred and sixty-eight and ninety-hundredths ($868\frac{90}{100}$) feet to a post in mound of stone marked "No. 2 x 522;" thence north fifty-one (51) degrees east one hundred and sixty (160) feet to intersection of westerly boundary of survey No. 315, made for the claim of the Marshall Silver Mining Company of Georgetown, upon the Reynold's lode; one hundred and sixty-four (164) feet to a point from which post No. 6, of said survey No. 515, bears south twenty-six (26) degrees forty-five (45) minutes east, at the distance of ten (10) feet; two hundred and five (205) feet to intersection of southerly boundary of said survey No. 515; three hundred and forty-seven and ninety-hundredths ($347\frac{90}{100}$) feet to a post in mound of stone marked "No. 3 x 522;" thence north forty-nine (49) degrees east one hundred and seventy-six and forty-four hundredths ($176\frac{44}{100}$) feet to a post in mound of stone marked "No. 4 x 522," from which Independence mountain bears south forty-eight (48) degrees east, and peak south of Clear Lake bears south thirteen (13) degrees east; thence from said post No. 4 south forty-one (41) degrees east twenty (20) feet to intersection of northerly boundary of survey
158 No. 314, patented to H. C. Chapin et al., with their claim upon the Winnebago lode; twenty-five (25) feet to a point on center line of the lode, from which a shaft on said survey No. 314 bears north (49) degrees east at the distance of fifty-six and five-tenths ($56\frac{5}{10}$) feet; fifty (50) feet to corner No. 5, which falls an inaccessible *duprep;* thence south forty-nine (49) degrees west fourteen (14) feet to intersection of westerly boundary of said survey No. 314; one hundred and eighty and fifty-one-hundredths ($180\frac{51}{100}$) feet to a post in mound of stone marked "No. 6 x 522;" thence south fifty-one (51) degrees west three hundred and fifty-two and ten-hundredths ($352\frac{10}{100}$) feet to a post in mound of stone marked "No. 7 x 522;" thence south fifty-four (54) degrees west

two hundred and ninety (290) feet to intersection of northerly boundary of said survey No. 260; four hundred and seventy-five (475) feet to intersection of southerly boundary of said survey No. 261; five hundred and sixty-five (565) feet to wagon road from Snake River to Georgetown; six hundred and fifty (650) feet to intersection of southerly boundary of said survey No. 260; seven hundred and six (706) feet to intersection of northerly boundary of said survey No. 261; eight hundred and seventy-three and ten-hundredths ($873\frac{10}{100}$) feet to a post in mound of stone marked "No. 8 x 522;" thence north thirty-six (36) degrees west thirty feet to intersection of southerly boundary of said survey No. 260; fifty (50) feet to the place of begin-
159 ning, containing one (1) acre and forty-two hundredths of an acre of land, more or less, and embracing fourteen hundred (1400) linear feet of said Equator lode, to wit, eight hundred and seventy-five (875) linear feet southwesterly and five hundred and twenty-five (525) linear feet northeasterly from discovery shaft on said lode, as represented by yellow shading in the following plat; excepting and excluding however from these present' all that portion of the surface ground hereinbefore described which is embraced by said surveys Nos. 260, 261, and 314.

(Then follows the plat of the lode.)

Now, know ye that the United States of America, in consideration of the premises, and in conformity with the said Revised Statutes of the United States, have given and granted, and by these presents do give and grant, unto the said Equator Mining and Smelting
160 Company, and to their successors and assigns, the said mining premises hereinbefore described as lot No. 522, embracing a portion of section twenty (20), in township four (4) south, of range seventy-four (74) west of the sixth principal meridian, with the exclusive right of possession and enjoyment of all the land included within the exterior lines of said survey not herein expressly excepted from these presents, and of fourteen hundred (1400) linear feet of the said Equator vein, lode, ledge, or deposit for the length hereinbefore described throughout its entire depth, although it may enter the land adjoining; and also all other veins, lodes, ledges, or deposits throughout their entire depth the tops or apexes of which lie inside the exterior lines of said survey at the surface, extended downward vertically, although such veins, lodes, ledges, or deposits in their downward course may so far depart from a perpendicular as to extend outside the vertical side-lines of said survey; provided that the right of possession hereby granted to such outside parts of said veins, lodes, ledges, or deposits shall be confined to such portions thereof as lie between vertical planes drawn downward through the end-lines of said survey at the surface, so continued in their own direction that such vertical planes will intersect such exterior parts of said veins, lodes, ledges, or deposits; and provided further, that nothing in this
161 conveyance shall authorize the grantees herein, their successors or assigns, to enter upon the surface of a mining claim owned or possessed by another:

To have and to hold said mining premises, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging unto the said Equator Mining and Smelting Company and to their successors and assigns forever; subject, nevertheless, to the following conditions and stipulations:

First. That the grant hereby made is restricted to the land herein-

before described as lot No. 522, with fourteen (1,400) hundred linear feet of the Equator vein, lode, ledge, or deposit for the length aforesaid, throughout its entire depth as aforesaid, together with all the veins, lodes, ledges, or deposits throughout their entire depths as aforesaid the tops or apexes of which lie inside the exterior lines of said survey.

Second. That the premises hereby conveyed, with the exception of the surface, may be entered by the proprietor of any other vein, lode, ledge, or deposit the top or apex of which lies outside the exterior limits of said survey, should the same in its downward course be found to penetrate, intersect, extend into, or underlie the premises hereby granted, for the purpose of extracting and removing the ore from such other vein, lode, ledge, or deposit.

162 Third. That the premises hereby conveyed shall be held subject to any vested and accrued water-rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water-rights as may be recognized and acknowledged by the local laws, customs, and decisions of court.

Fourth. That in the absence of necessary legislation by Congress the legislature of Colorado may provide rules for working the mining claims or premises hereby granted, involving easements, drainages, and other necessary means to its complete developement.

In testimony whereof I, Ulysses S. Grant, President of the United States of America, have caused these letters to be made patent, and the seal of the General Land-Office to be hereunto affixed.

Given under my hand at the city of Washington, the 18th day of April, in the year of our Lord one thousand eight hundred & seventy-six, and of the Independence of the United States the——

By the President:

[GEN'L LAND-OFFICE SEAL.]

U. S. GRANT,
By D. D. CONE,
Secretary.
C. W. HOLCOMB,
Recorder of the General Land-Office.

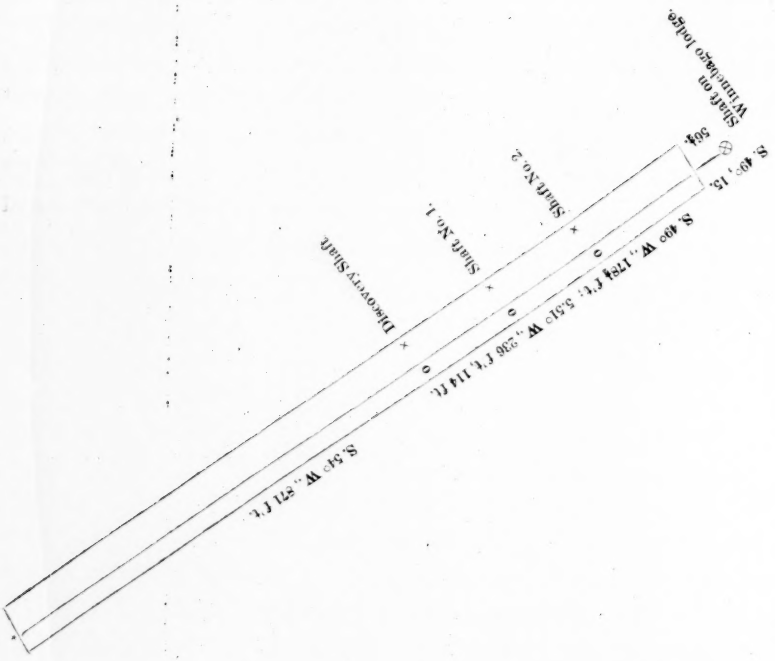
Recorded vol. 20, pages 255 to 262 inclusive.

Examined.

163 Defendant here introduced in evidence a portion of the certified copy of the land office proceedings upon the Equator entry and application for patent, which is in words and figures as follows:

Plat of the Equator lode, situated in Griffith mining district, county of Clear Creek, and Territory of Colorado.

North.



South.

Notice is hereby given that the Equator Mining and Smelting Company, by their agent', John J. Simmons and John Turck, do claim by purchase and pre-emption fourteen hundred feet in length by fifty feet in width of surface ground on the Equator lode, being a silver bearing vein of rock in place, and situated in the mining district, county and Territory, aforesaid, the location and extent thereof being more fully described as follows, to wit:

164 Beginning south 49° west 56½ feet (true course) from a shaft on the Winnebago lode to eastern boundary of Equator lode; thence on same course S. 49° W. 187½ feet, and in equal width of 25 feet on each side of the crevice along said Equator lode; thence south 51° W. 350 feet, and in equal width of 25 feet on each side of the crevice along said Equator lode; thence S. 54° W. 871½ f't, and in equal width of 25 feet on each side of the crevice of said Equator lode to western boundary, embracing a surface claim of 70,000 square feet, adjoining claimants unknown, as set forth in the foregoing plat; and we do hereby give further notice that having occupied and improved the

said lode according to the local customs and rules of miners in said mining district, and having expended, in actual labor and improvements thereon, an amount not less than one thousand dollars, and being in the peaceable possession thereof, we will apply for a survey and plat of said premises and a patent for the same, under the act of Congress entitled "An act granting the right of way to ditch and canal owners over the public lands, and for other purposes," approved July 26th, 1866.

Witness our hands and seal this 13th day of May, 1869.

EQUATOR MINING & SMELTING COMPANY. [SEAL.]
By their agents, JOHN J. SIMMONS. [SEAL.]
JOHN TURCK. [SEAL.]

165 I hereby certify that I have this day , 187 , posted in a conspicuous place on the above claim a copy of this plat and notice.

Attest: F. F. BROWNE.
HIRAM J. SPRUANCE.

To the admission of which patent, and of the sundry land office papers & decree offered by defendants, the plaintiffs then and there severally objected; which objection was overruled, & the defendants then & there excepted, & the circuit justice, Miller, stating that it would admit said patent & all the other papers for what they were worth.

GENERAL DESCRIPTION.

It is a silver-bearing vein; its dip nearly perpendicular.

The improvements on the claim consists of seven shafts, in aggregate depth 920 f't, and drifts on the vein aggregate 1,000 f't in length, and were placed upon the said claims by the claimants and their grantors, and the value of the said improvements, together with the labors expended on the same by the said claimants and their grantors, is not less than one thousand dollars.

166 *Legal notice.*

UNITED STATES LAND OFFICE,
CENTRAL CITY, COLORADO TERRITORY,
May 14th, 1869.

Notice is hereby given that the Equator Mining and Smelting Company, by their agent', John J. Simmons and John Turck, claim by purchase and pre-emption fourteen hundred feet in length by fifty feet in width on the Equator lode, its being a silver-bearing vein or rock in place, and situate in Griffith mining district, Clear Creek County and Territory of Colorado. The location and extent thereof being more fully described, to wit:

Beginning S. 49° west 56½ feet (true course) from a shaft on the Winnebago lode, to eastern boundary on the Equator lode; thence on same course S. 49° W. 1,872 feet, and in equal width of 25 feet on each side of the crevice along said Equator lode; thence S. 51° W. 350 feet, and in equal width of 25 feet on each side of the crevice along said Equator lode; thence S. 54° W. 871½ feet, and in equal width of 25 feet on each side of the crevice of said Equator lode to western boundary, embracing a surface claim of 70,000 square feet, and it is more
167 fully described upon the diagrams and notices thereof filed this

day in this office and to be posted upon the claim itself; adjoining claimants unknown. They also give notice of their intention to apply for a patent therefor from the Government of the United States, under the act of Congress approved July 26th, 1866.

IRVING STANTON, *Register.*

And the defendants, to further maintain the issues on its part, here introduced the witness, JOHN TURCK, who, being duly sworn, testified as follows, to wit:

I am acquainted with the Equator lode. I was formerly an owner of the Equator lode. I was familiar with it at the time of its discovery. It was discovered in July, 1866. I know where the discovery shaft is (witness points it out on the map). I first knew the discovery shaft in July, 1866; at that time it was sunk about 4 feet; it was subsequently to a depth of 15 feet before it was recorded; it contained crevice material, a well-defined vein. I was one of the original locators; the discovery shaft, engine shaft, shaft No. 2, shaft No. 3, shaft No. 4 east, and the west shaft were all sunk to a certain depth before 1872. The deepest shaft before 1872 was the engine shaft, which was about 400 feet deep. The No. 2 shaft east was about 75 feet. That one over there, No. 3 shaft, was about 130 feet. At No. 4 shaft it is
168 about 45 feet, still further east. Going west, before 1872 we sunk what is called the west shaft. It was 75 feet deep; that is, 140 feet west of discovery shaft. Still further west is the Bell shaft; that was commenced in 1871 or 1872, I won't be certain. These shafts were all sunk on the Equator vein. The vein was found right at the surface at the discovery shaft and the other shaft with a little drift on top. It was the same at the engine shaft, and the same at the west shaft. We found it right on the surface; the material rose right there where we started, at the first hole. We sunk right down. We struck what we called the apex there at that point. We struck the apex probably the deepest at the shaft furtherest east, right on top of the surface—the ore right on top up to 1872. We had done this work I have stated and other levels, and part of the level on the Kirtley lode, and a level 150 feet down in the main shaft. We ran some east and some west. Before 1872 I think we had a connection made pretty nigh clear through, and some of it connects through. About 130 feet down we had worked out. The connection was from the Hunter No. 3 shaft all the *the* way up to the discovery shaft before 1872; the distance would be between 400 and 500 feet in length. Before the application for a patent I suppose we had done about $50,000 worth of work. We had No. 3
169 shaft, the east shaft, and we had what we call the air shaft, the one east of the main shaft, sunk on the main shaft and discovery. McFarland & Coulter were associated with me when the discovery was made. I have been familiar with that mine ever since. I have been through the lower workings recently. The main shaft has attained the depth of 400 feet. I think I am acquainted with the 360-foot level; it is upon the Equator vein; the same vein found at the top, and the same found in the discovery shaft, and the same vein that I located on. I have made an examination with reference to the south wall, and am familiar with the mine; been there pretty often. There is what I call a south wall; right close to it there is ore; the best body of ore is right close to the south wall; all the ore—large bodies of it is pretty close to the south wall. The surface or top would be within the patented lines; the lower level would not be. The vein dips about 16 feet to the 100 towards the north; as a general thing this has been the uniform

dip. I think the south wall is 25 feet inside of the south line of the Equator, nigh the center. It is not quite in the center of the Equator; it varies a little between the shafts. The west shaft is near the center.

In some places the south wall is on the line of the Equator.
170 There are some places a foot or two it varies. I think the width of the vein near the discovery shaft would be 25 or 30 feet. We ran a trench up there to show it.

On cross-examination John Turck testified as follows, to wit:

In the fall of 1872 the west shaft was about 70 or 75 feet deep. I think it was commenced in 1870. I am not certain. It was sunk by the Equator company on contract. I forget the names of the contractors in 1872. I don't think there was a connection between the west shaft and the discovery shaft on the Equator. This shaft here was sunk to develop the lode, and all the ore we could get out. The discovery shaft in 1872 was from 25 to 30 feet deep. I think it is 150 feet deep now. The engine shaft *is* about 400 feet deep then; it is about 440 feet—something like that—now. Shaft No. 2 is about 75 feet deep. Prior to 1872 we run some levels from the main shaft at a depth of about 120 feet, and then another one at a depth of 250 feet or 300 feet, and stoped out the ore running away under the shaft to the west of it. We went in 150 feet from the main shaft, engine shaft, and took out a large body of ore then. I suppose this drift would be about 20 or 30 feet west of the discovery shaft. Prior to 1872 we had two drifts
171 west of the discovery shaft of more than 23 feet. The workings mainly up to that time was to the east, mostly in that shaft. We got ore on both sides. The larger body was found west. I said that was the same lode all through here. The only way I could tell the width is at the Hunter tunnel, 20, 30, or 40 feet. I never found the north wall in this vicinity. I cannot state whether it was 25 or 30 feet wide or not. So far as I know there may be a large body of country rock between the Equator and Square & Compass. I don't know—can't say how wide the Equator lode is at the engine shaft. I never ran any cross-cut in the vicinity of that shaft. I think we did find a south wall; it was inside of the south line. Can't tell how much. I think it was right inside the side line, north of the south side line, I suppose, 25 or 30 feet, I should judge. We found the south wall at the west point; it was 25 feet from the south side line. I judge that the south side line was about the center of the location. It is hard to tell the width of the vein at this point; as far as I know it went all the way through the west shaft up to the side lines of the Colorado Central; it may be wider for all I know. This shaft is sunk upon the vein matter all the way down. The west, I believe, 4 by 8 feet; I won't be certain; that is,
172 inside of timbers. I won't be certain I found ore right on top of the ground. In sinking we did not take out much, merely enough to be certain we were on the vein. I suppose we got 100 pounds on top of the ground; regular lead ore. I think the Bell shaft was sunk in 1871 or 1872. I won't be certain about the Bell shaft, but the west shaft was discovered before 1872. I know where Mr. Linn discovered what is called the Colorado Central lode. I don't know whether the Bell shaft was sunk at the time he made the location. I think we sunk it in 1871 or 1872, 65 or 70 feet; won't be certain. There was not much ore taken out; we had crevice material; it carried silver; we did not get any ore; that is, only the ore that is in the crevice material; probably 18 to 20 ounces out of that material. I think this shaft was sunk still further the last year, since the controversy between the Equa-

tor and Colorado Central. We started another shaft there; we did not name it. We started a hole there and took possession of it, when they sent down some men and drove us off, and kept us off; this was after the controversy commenced; not the present controversy. Except the drift running east from the main shaft, that is all the work I think we had to the fall of 1872 before Mr. Linn located the Colorado Cen-
173 tral. There was two other persons connected with me in this discovery, McFarland and Coulter. We claimed at the time 1,400 feet. The present side and end lines do not on this map correspond with the location then made; we made another location afterwards. I think the second location was made the same year; when we took 3,000 feet, and I think the third was made the next year, I won't be certain. We took out a large amount of mineral from the main shaft. In the west, Bell, and discovery shafts we did not take out much on the surface. In the west and Bell shafts we took out none and made no mill runs. I selected the hole I spoke of a few minutes ago from where we were driven off. The hole I spoke of down below is about 80 feet west of the Bell shaft; it was about 10 feet deep; it was commenced in 1872 or 1873, I think; nothing done on it since I was driven off by Mr. Linn's men; never tried to take possession since.

On redirect-examination John Turck testified as follows, to wit:

I said that McFarland, Coulter, and myself made the discovery. Mr. Simmons, Mr. Porter, and Mr. Carpenter succeeded them, and they sold out to the Equator company. The Equator company succeeded
174 these three men in the possession. That is the pre-emption I refer to. This was in 1867.

The defendant, to further maintain the issues on its part, here introduced the deeds of the original locators to the Equator lode.

Defendants, to further maintain the issues on its part, here introduced the witness WILLIAM O. CARPENTER, who, being duly sworn, testified to the jury as follows, to wit:

I have been acquainted with the Equator lode since 1867. I was one of the owners, with others. About July, in 1867, Mr. Porter, Mr. Simmons, and others interested, purchased into this lode. I purchased for them and myself, I think it was in July, of Mr. McFarland's and Coulter's two-thirds, and immediately began to work at No. one shaft, the engine shaft—there had been done some little work before purchasing—and sunk the shaft down 40 or 50 feet right along. I can't tell what time it was done, in June, July, or August. I will first go in that engine shaft; we sunk that shaft and drifted east, and drifted east on top of the ground, and a little west, not very much; kept sinking all
175 the time; took out considerable ore in the shaft, and after going down I should suppose 75 feet we began to drift west, may be 100 feet, and we found the ore body in going west, and we drifted out in the whole distance west of the engine shaft 185 feet. I will give that distance now; west of the engine shaft 185, but we drifted and stoped a very large amount of ore; we found the ore pitching west as we went west with our drifts, winzes and stopes. We then came back and sunk the shaft 150 feet; that is the way we call it; 150-foot level west of the main shaft; we drifted out under the discovery shaft; the ore there was two to four feet wide in some places; took out amount of ore there, and some of it very rich. I will remark that the discovery shaft now connects with the drift we run at that time; and east we also drifted near

the surface and down about 75 or 100 feet deep, and found quite a good deal of ore there; some of it very rich. We also, at the same time, sunk No. 2 east; we struck the No. 1 shaft right at the cross-cuts, and followed it straight along up to the outcrop of the lode, and then went down with the crevice. We went down on the lower wall, where we first started our shaft. I mean the south side of it, the lower wall on the *the* south side; we struck the lower wall and went down quite deep; sunk the No. 2 shaft and went down 70 to 75 feet; we worked east in
the No. 3 shaft to find the lode. We found a good deal of
176 float ore and went in 35, 40 to 50 feet. From the surface we run
across from there and did not find what we thought was the crevice; did not find the crevice, and went back in the next spring where we passed over some boulders, and there we struck the crevice, sunk in and on that crevice on the lower we struck some crevice rock about—I did not know at that time—I should say from the surface 12, 15 to 18 feet deep; on the upper side 50 feet; I am speaking of shaft No. 3 east; sunk it down 156 feet. There was also a shaft still further east between 40 and 50 feet deep, and there we struck the crevice right at the top on these east workings where the Kirtley tunnel crosses, where the Kirtley and Hunter tunnels run in on the crevice—the crevice follows around in that tunnel; the tunnel goes very near right angles with the lode, and it is 20 to 22 feet in width; we measured it. I have been in that
Kirtley tunnel, all through it; examined it very closely, and the lode
177 between there down below the Kirtley tunnel in the Hunter tunnel; the lode there we don't know how wide it is, but know it is 35 feet or more in going across it; we have got to the upper side; we have got through in the Hunter tunnel, clear through to the engine shaft, and we had a good deal of good ore there. That in general covers the workings. There has been a good deal of stoping in that, a large amount of stoping in that 135 feet. The discovery shaft; in approaching that I examined the ore and crevice matter that came out of it, taking ore from the top that assayed from 6 to $600 per ton out of that on top, and I could see the streaks of ore in some kind of sulphurets that was in the discovery shaft, and I had got many assays of it, and every assay would give me, the lowest $6 and the highest $600 to the ton; I also picked out some on the side of the discovery shaft myself in order to be sure that it was the same quality as this other, and I found similar results in taking out ore. The west shaft was sunk in
1872; it may be in 1871. I have not the actual date now. The
178 Bell shaft was sunk close by in that time, I should say in 1872. The engine shaft is sunk down 450 feet, and there was drifts run from it; they were run in 1869. It was prior to the Marshall tunnel, and in getting there we crossed the ground and got 15 or 20 feet before they got there, three or four months; I think it was in 1869; may have been in 1870. The drift at the 300-foot level goes west a long distance there; I don't know the exact distance now, but I think about 600 feet; we had from the engine shaft all the way on the 300-foot level, in which we had followed down from the discovery; from the engine shaft, we followed ore from the top in the shaft and following in the pitch of the ore northward of the ore in the premises; we then come down to the ore in the 300-foot level and run out about 125 feet on ore that did not pay. There would be one inch to 2½ inches of ore, sometimes 4 inches, but averaging about 2 inches that did not pay, but after we got beyond 140 feet west in the 300-foot level there we found ore that was better;
a little further distance on we found very good ore; took out ore
179 that has gone high, and the 360-foot level was also on ore right

through; it was dug a long while ago; there was 13 feet run in there and there it lay awhile, and afterward we commenced, a year and a half ago, to run that drift again: we had ore there for a 100 to 105 feet, and then we had broken ore for a distance. I am speaking of the 360-foot level going west, and from that time we have been working in that vicinity, which the map shows and evidence shows are worked on the crevice matter, that is at the manhole near where the switch in the track is made there and where they broke into us; just back of that 40-foot there is ore shows there now on the upper side of the drift, north side, and going off into the Colorado Central working; that is out of ours and into theirs, within a few feet. The other end, going east from the Marshall tunnel—from the engine shaft, I don't think on the 360-foot level we had any ore; there may have been a streak or two; on the 360-foot-level going east. I have been down the Bell shaft many times, for the first 65 or 70 feet it is sunk very nearly straight—a little pitch, and then the crevice matter begins to dip to the north
180 quite heavy and seems to follow it up. Ever since we have been sinking it on the crevice matter all the way to here, just below 70 feet, down to the present end. When I was there last, which was last Monday two weeks ago, from the engine shaft there was ore all the way down, and going west, following the ore chimney, the ore chimney pitching off all the way, it is continuous all the way and large amounts of ore there. We must have taken out prior to 1872 close to $200,000. Before 1872, on the 150-foot level, we went west for 185 feet, but the last part of it did not pay. And going down on the 300-foot level it goes, I don't know just how far the ore goes west on the 300-foot level; the maps show. There was opening cut all along the surface 15 to 20 feet deep from the engine shaft to the Bell shaft to strike the crevice, at the time we were proving up, made by the Equator. The whole formation has dipped as we have gone down. We had no more walls but we get bank colored rock, that went down a piece and then followed the dip of the mineral and crevice matter and went off gradually to the north, I think. We had a south wall in the 360-foot level
181 west; we had some black schist; still I don't think that is the wall I have examined in the tunnel. I found porphyry on the north side, and I find a wall above that porphyry, and I judge on the south side forming that wall in the tunnel, that is not the wall, but still it may be.

On cross-examination William O. Carpenter testified as follows, to-wit:

My impression is that I first knew the Colorado Central in 1872, soon after the discovery. I think it was fall of 1872; am not positive. At the time I first knew the Colorado Central, the following work had been on the Equator: the west shaft had been sunk, and the Discovery shaft, and our drift from the engine shaft west. The drifts extended west between 112 and 185 feet, 73 feet west of the discovery shaft, I think; the west shaft was sunk at that time. The holes I speak of as being sunk was sunk after the discovery of the Colorado Central. We dug in there prior to this time and found the crevice matter, but we dug these holes that time to show up. Prior to the discovery of the
182 Colorado Central the ore had been principally taken out east of the discovery shaft. As near as I can tell, we took out $200,000.00 prior to 1872—somewhere about that, I think; that about 15 to $20,000 was taken out west of the discovery shaft; don't think it was less than that. After 1872 there was a period of suspension of

work on that drift. We have been working the mine all the while. We suspended some portions of the work, I think, in 1870. Prior to 1870 I suppose there were at times 30 to 40 men, and down again to 20, working in the mine; after 1870 I don't know how many—from 5 to 15, until we commenced work a year and a half ago. From 1870 down to one year and a half ago, I can't say positively, but it has been worked by from 5 to 15 men, as near as I could judge. I think the 360-foot level at the time I spoke of it was from 600 to 700 feet in length; I never measured it. The ore in it ran from 15 to 40 ounces, and would not pay for taking it out; can't say how much pay we have taken out of it; we have taken pay out of it considerably. From the manhole east in the shaft where we are sinking in the 360-foot level I
183 don't know how much we have taken out; we are taking out some there. I don't know how much has been taken out east of the manhole; not very much. The pay was taken out in that shaft from the manhole to the west; there was some pay east, I think. My impression is that the Bell shaft was started in 1872 or 1873. I am inclined to think, from memory, that it was sunk after the discovery of the Colorado Central. It is sunk on the crevice; from the top of the surface in slide followed crevice material; all the way down there was a little pitch down. We struck the first ore-shoot somewhere from 100 to 150 feet in depth, where there was no ore to amount to much; am not certain about the distance; it was some distance down, at any rate. In 1867 I think this was 70 feet deep; the shaft was nearly perpendicular for about 65 to 70 feet; don't know much about others; have put the instrument to it so they can tell. I think we began work again in the Bell shaft; I think it was in the fall or last winter, since the commencement of this controversy; a good part was done this
184 spring. We found the ore-sheet 100 to 150 feet below the surface, somewhere about the turn; I think it *becomes* to come in about the turn, but from the exact point I did not notice; that was nearly a year ago. I can't say how much ore we have taken out in sinking the Bell shaft; can't approximate it. I think we took some ore out when we first worked it. Very nearly all of it has been taken out of the Bell shaft since this controversy began.

Defendant, to further maintain the issues on its part here introduced in evidence to the jury, the certificate of the register showing required notice has been given, also affidavit of publisher, from the land office proceedings already in evidence.

Also affidavits concerning posting of diagram, &c., from the land office proceedings.

The defendants also introduced in evidence a deed from John Turk to his interest in the Equator lode, made subsequent to the application for patent.

185 Defendant, to further maintain the issues on on its part, here introduced the witness HAL. SAYRE, who, being duly sworn, testified as follows, to wit:

I reside at Central City. I am a mining engineer; have been engaged in that business since 1863. I am familiar with the property in controversy. I am acquainted with the Colorado Central, that portion inside of their survey, and am acquainted with the Equator lode. I have surveyed the workings of these two properties. I made the survey about two weeks ago in connection with Mr. Johnson; we were mining engineers appointed by the court, as I understand it, representing the different parties; I, the Equator, and Mr. Johnson, the Colorado Cen-

tral parties. This is the map of the workings of the different properties. This is a map showing the workings on the ground in controversy; the green tint here representing the patented lines and patented ground of the Equator, and the gray the Colorado Central. (Witness points out the different shafts and openings.) This map is made from
186 actual survey and is correct. Here is the 360-foot level, this brown tint; here is the 300-foot level and the workings that are carried up from there are carried up in the stope; that won't show; the lower level, that is brown, that is the 360-foot level, the other is the 300; the levels get their names from their depth; that is (referring to glass model), a copy of the map with the levels transferred and placed to a scale to their relative positions in the ground, the lower sheet showing the 360-foot level and the Marshall tunnel level, which is on the same horizontal plane; the second one is another level above, and so on to the top, the top showing the slope of the hill with the surface lines and shafts on top; the various shafts, carried down from the surface, are shown by the strings carried down and shows their true relative position to one another and the other workings; the slope of the hill is about 350 to the south; it raises to the north; the jury are looking north across the workings; here they are on the upper hill side, and there they are down on the hill side; I mean their discovery. That is made to
187 a scale 20 feet to an inch; that distance between the two is about 50 feet, the next two represent about 40 feet, the next a little over 50, next 25½, next 26, next 44, and the next to the top of the Equator lode; from here to the top represents the Colorado Central discovery, 137 $\frac{6}{10}$ feet from where it strikes these stopes to where it comes to the surface; the Equator workings are about 30 feet less. The depth from the top of the Equator lode represents about 400 feet from the top of the Colorado Central lode, from the top of the Equator about 360 feet; the lower plate (referring to glass model) carries the horizontal projection of the Marshall tunnel level here, and the 360-foot level of the Equator there; the next plate from the bottom carries the 300-foot level which is this right one, and the 330 which is marked on the Colorado Central, and the next is the 290-foot level, and there are no Equator workings that show on that because it is more stoped from there up, it is worked out and set up; that is, that 291 represents the next which is the brown level here and there are two cross-cuts
188 to the south. The next is 236 feet from the surface which is represented by these green ones and here are cross-cuts into the Equator stope run by the Colorado Central. The next is the 210 feet from the top of the Colorado Central shaft. There is a cross-cut run from the Gates shaft and branches and strikes what is called the Hopkins drift, which has connection with the Bell shaft. The next is marked 184, simply a drift from the west shaft to the top of the Gates shaft, an offset in it from this point to here, striking a run, which shows also in this cross-cut here on the same level, which shows in this sink. That crosscut crosses into the foot-wall, here showing a vein of ore which goes through here and meets the Gates shaft, top of the Gates shaft, and meets the other level which is carried from the top of the west shaft, and same as the Thompson-tunnel level going in here. What is called the Thompson streak, passing the Equator vein, and 40 feet further to the east meeting with the Thompson streak, and that which is
189 shown here is carried out in yellow there. That whole work was done by the Colorado Central people and their grantors. The next is the surface. The red and white represent the Equator, and the blue the Colorado Central lines. This is the engine shaft,

Equator discovery, west shaft, Bell shaft, and here's the Colorado Central discovery. The Discovery shaft is shown immediately west of the engine shaft. The west shaft is shown still further to the west, and the Bell shaft is shown by the extreme shaft there. Starting at the surface, I have never been in shaft No. 2, except that is seen along the bottom of the levels. I have never been in shaft No. 2. I have been in the west shaft, Bell shaft, Discovery, and engine shaft. In making the survey of the mine we commenced at the Thompson tunnel. We first went into the Thompson tunnel, and second the Equator vein, as you may call it; from that point easterly is said to connect with the engine shaft, although I have never been further east than that.

190 Then from there to the west shaft which, I understand, has been driven to the level on this Kirtley tunnel; 43 feet north of it, you come to what is known as the Thompson streak. The discovery shaft dips to the north at the angle of about 70°, and when you come to the Thompson streak you find it dips at a greater angle. It dips 20° *degrees* from a vertical. Then immediately after passing in the Thompson-tunnel level; you in passing in the Thompson-tunnel level, you in passing what known as the Thompson-tunnel streak, you come to a small piece of gneiss rock, seemingly the form of the north wall, and you can go into crevice matter until you arrive away up here to one of these veins. I am not sure which one it is. Just above this one here you have gneiss rock again, and then it is gneiss rock, except that little crevice there. Those workings I am speaking of is the work of the grantors of the Colorado Central. That is the Thompson tunnel. I don't know the Marshall tunnel patent from the Colorado Central patent. When I say Colorado Central I mean all of them, because

191 I do not know the two owners, as they all seem to be connected in some way. Returning, however, into this level which stops in gneiss rock, after you have gone in about 20 feet, then a crevice comes in from the south, dip in about this way; you can go on perhaps 30° from a vertical, and has been stoped out, has been carried up; if I had a cross-section I could explain better perhaps, that can come as well *as* afterwards, has been stoped out until it comes to the Equator ore-vein, running along this—that crosses this level—that lies horizontally and then goes down the winze. I have never been down that. Still further out here you go about 20 feet to the bottom of the Colorado Central discovery shaft. There is no ore showing in the bottom of that shaft that I know of—I never saw any continuing on 19½ feet to where the red line which are shown to be run—we come to a vertical vein, or nearly vertical, and one having a dip to the north and form a junction in this level that we are running in on. Here is a cross-cut opened north 8½ or nine feet, from the point of our instrument in that way shows gneiss rock again, which, in all probability, is the

192 wall of that level. On the glass model you come into the Thompson tunnel, following in on that; here is the Equator streak; here is what is known as the Thompson streak. There is a winze coming down on what is known as the Thompson streak, and here is the stope that is carried up and forms a junction with the Equator streak coming down from the surface; it leaves it half way or about 50 feet, I have never been allowed to go into this working; it leaves the Equator ore streak and forms a streak by itself, and forming this Thompson tunnel level, having been driven on or very near the Thompson; that red string represents it very near; that is what is called the Thompson streak; the other one represents the Equator streak, and this one comes down here, represents the Equator ore-streak, with a

triangle of ground between the crevice matter; passing along from this level 19½ feet from the discovery, there is the ore-vein coming in from left and south on a dip of about 30° from a vertical, and you trace that until you come about 38 feet. From this point there is a wall logged up in the left-hand side or south side of the level so that
193 it can be seen, and at 18 feet from this point there is an off set; at an angle to that is a vertical or very near vertical vein coming down into the and out of the floor of this level. Proceeding along this vein to the west shaft the indications are that the shaft was sunk very nearly if not quite on this vertical ore seam, and the two having formed a junction and coming down that shaft proceeding on this level; here is an ore-seam coming in, which is doubtless the same ore-seam showing on the south side about the inclination from the vertical; this is driven back on it and rises in this way as you go back. Then going still forward that ore-streak goes out here, and is followed out there following on this seam. This is all crevice-matter the whole distance. The ores are shown in the cross-cut to the south, and that end there is still in crevice matter. Returning to the west shaft you descend 44 feet, and that takes you down to the end of the west shaft, and to the Gates shaft, represented on the Gates level. Here's the Thompson-tunnel level—
194 you come here to the Gates shaft; now you descend to this plate; that string representing the west shaft that takes you down to the top of the Gates shaft; that is represented by this next string carried down to the Marshall-tunnel level. Now, as you go west from the Gates shaft at 6 feet west, here is a cross-cut driven south 77 feet; between this level which is driven west and where the sink or shaft is shown there, there are four ore-seams, seemingly ore-seams, all having a slight dip to the south. At this sink there is a larger ore-seam, I am told is following, which has a strong inclination to the south. About 15 feet south of that sink you come to the south wall, the gneiss-wall, in which the drift continues in a ways. Then coming back, west, following on the level you go west to where this off-set is shown in the level there, at the distance of 5 feet from the centre of this level to the south there is a large ore vein having an inclination to the north; on the south side of it is a smaller vein having an inclination this way, one having every indication as being on that sink, and consequently converges at the top of this shaft. At the top of this shaft we de-
195 scend to the next level; that level was driven by the Colorado Central people. Here we return to the east of the shaft and immediately at the north side and east of the shaft is a vertical ore-vein coming down or very nearly vertical, and is followed out there 15 to 20 feet. Returning there and taking the cross-cut about 10 feet from this ore—about 6 feet from this ore vein is another ore vein coming down at an inclination of about 20° from a vertical to the north; then following back on that cross-cut, here is what is known as the Hopkins drift, and here is a streak which also goes back with the Hopkins drift; just beyond, breaking into the Hopkins drift, there is a slip very nearly vertical; on the south side of it there is one having a dip of 20° to the north. This is a back-stope—it is carried from the 360-foot level, is the back-stope of the Equator vein appearing here; going in back further, that is next is called the Tralan drift, a little back of that back-stope, entirely in crevice matter, and dipping to the north. Here is the crevice which goes to the north; again going back a distance of 26 feet we
196 come to the level driven by the Colorado Central people, showing a very nearly vertical ore vein, driven east and west; going to the south is another crevice of ore; there is a slip; that cross-cut was

driven 15 feet without any ore; still further to the south was another driven on an ore vein dipping to the north slightly—I believe to the north. Here is a connection and said to connect with the back stope of the 300-foot level. Here is the back stope of the 300-foot level, and here it shows ore-vein, the two veins still having been to the north at that point in the Equator workings, but as you go west—as you go easterly, the two crevices as shown on Mr. Johnson's map are separate, the point of separation rises higher, and so the stope takes in both of them, and makes the large open space, and still westerly is one where the dirt has been filled in; descending this shaft again as you go down to the Gates shaft you come to a cross-cut about 20 feet and here are levels, and

197 here is a level with two cross-cuts driven by the Colorado Central parties, this level showing a slight inclination to the north and the cross-cuts being wholly in crevice material; descending still further we come to another level and cross-cut, the level being driven westerly and connects the level that is driven from the cross-cut north from the Equator, and forming a junction here at the top of the mill-lode, coming out through here and going in what is known as the Grace cross-cut, going into the Equator and follow it to the engine shaft and west to the extreme end of the level; going still further down the Gates shaft 25 or 50 feet you come to the Marshall tunnel. The Marshall tunnel is drawn easterly and westerly from this point, and two or three cross-cuts to the north and south. Here is a cross-cut that intersected Equator workings and this one and that one both show gneiss rock. This one shows porphyry. This one shows crevice matter. Following back on the Marshall tunnel, here is what is known as the man hole where

198 the two drifts approach so near together that they are broke in. Still further back there is a cross-cut and still further back they are connected with the Marshal tunnel; westerly this approaches the Equator working. Here is a sink of about 45 feet in the crevice matter and showing good crevice here. Here is another sink full of water and inaccessible of 30 feet deep. Then going on the 360-foot level of the Equator here is what is known as sink No. 2; that is sunk on the crevice matter coming down on the foot wall of the lode and mineral in the shaft. Here is sink No. 1, 19 feet across the main crevice which follows a foot-wall, and then goes vertically down. Subsequently there was a cross-cut made which is shown in that section and cross-cut to the south still made in gneissic rock; there they come back and commenced work on the level proper with two levels sunk before the Marshall tunnel and Equator level. Then about 6½ feet here at a point 40 feet be-

199 low the Marshall tunnel level. These are all the workings from the top to bottom. Now coming back from the surface and going back to the Marshall tunnel, I very much doubt if there is any country rock between the Marshall tunnel level and the 360-foot level; there may be a small horse of country rock in these following to the west at some point before you reach this cross-cut; it all disappeared, because that cross-cut is wholly in crevice matter at every other point westerly to the bottom of the works, they seem to be wholly in crevice matter. The depth of that shaft is 87 feet. Sometimes in some of these cross-cuts you will find a little gneiss rock, but a very little now. Only one point more. Taking the dip of the foot-wall of the Equator lode which averages about 70°. Taking that dip as the average dip, say 20° from a vertical, I will premise by saying that at this point shows prophyry, at that point shows prophyry, on the north side of the Marshal tunnel, at this point it shows porphyry, and at this point shows prophyry marked with little red dots. That shows the casing of the north ore vein to be porphyritic.

200 Now going to the Marshall tunnel and 45 feet back, shows the back or top of this porphyry dike, and examining that and taking the dip of that it shows a dip of about 20° from a vertical, so that the foot-wall of the Equator lode corresponds exactly with the north wall of this dike, and consequently the north wall must be the north wall of the dike; the south wall must be the north wall of the lode, and that the lode in its downward course must at some point assume the same dip; the whole lode must assume the same dip that the dip shows itself back, where it is not distributed and unbroken it crosses fronds very nearly the exact dip or nearly exactly with the foot-wall. In the Thompson tunnel the gneiss rock occurred north of the Thompson ore-streak, but in very small body, and I think it to be a horse, but when you come to this point there it shows a lead gneissic rock, and immediately passing this vein solid gneissic
201 rock; right there solid and unbroken, and at this point, about 9 feet from the center of the line of the Marshal tunnel, is this porphyritic rock. This cross-cut here shows no crevice from a point about 10 feet from where it leaves the Marshall tunnel. That porphyritic wall is on the north side; there is none on the south side. The wall I was speaking of, on the south is the foot-wall. That is gneiss rock. On the south side, along here, there are no breaks that show it; I don't know any place where it is broken through. That brown line to the east is the Kirtly tunnel, or the Kirtly-tunnel level. Here is the Kirtly tunnel, and here is the Kirtly-tunnel level, driven on the Equator vein; from the Kirtly tunnel it follows an ore-vein all the way, and terminates west of the engine shaft; that beyond it is a higher level; I consider that on the same ore-streak, only one is below the other about 50 feet. There is a difference in the detached portion of 50 feet (witness shows it on the glass model); I think it is the same vein or streak;
202 I could make it a good plainer if I had a blackboard. Well, this has been extended so that the discovery shaft of the Equator connects with it, but I have never been through it. There are witnesses here that will swear that it has been traced west of the discovery shaft. If I had a blackboard I could explain where it goes to (blackboard is put up). In this surface ground at the Equator engine shaft or crevice, you come down the engine shaft about 50 feet, here is a vein putting off in this shaft to the engine shaft or Equator vein proper, continues down in that shaft. Now, then, you go up to the Colorado Central shaft at the top, and they sink down about 50, 60, 70, or 80 feet; they have testified all depths before they strike any vein at all, when they did strike a vein they struck this vein, a little vein coming off forms a junction 50 feet from the surface, struck a vertical shaft, struck it in the position where they have a vertical vein now; that vertical vein continues down where they struck into the other vein as
203 they are approaching all the time, and then take to the dip of the porphyry wall as the porphyry dike, and maintain that through it as you go west; this is a horse of ground in here, but that is in reality not wholly barren because it is mostly a crevice matter, these seams of ore, nearly all of them, having a northward tendency; as you go west the top of this rises, and you go to a point where the surface ground will be shown as this, showing a separate and distinct outcrop, this ore, from the other, and simply because the top of it having been eroded by time, and did originally form such a junction as that in the engine shaft; I don't think there is any doubt of its being one vein all through there. This is the 300-foot level, your honor, not vein, it followed a continuous vein; it is outside of the Equator, carried

out by reason of its dip. It first goes outside of the side lines; at the engine shaft you come to a point which would be shown there; when you come to the edge of the granted line, we are outside of the perpendicular lines. I think that the 350-foot level
204 and the 300-foot level is on the same streak, and upon the same vein found in the engine shaft and discovery shaft; it can be followed through the various levels and stopes continuously, and is the same vein. The vertical glass model is out of position just now. Here is the top of the engine shaft; now there in its dip it goes down—represents the inclination of it. Here you enter into the top of the engine shaft; if put together this point would cover the top of that; now you descend in the Equator shaft you meet what is known as the Kirtly tunnel, which you see up here on the other horizontal map. Then still further down you come to—that is the Hunter-tunnel level, that is carried further east; further to the east the blue that represents the Hunter-tunnel level; still further down you come to the 300-foot level, and still further on you come to the 360-foot level. Then immediately across and on the same horizontal plane is the manshole-tunnel
205 level. Now in this one here we have a cross-section of the Bell shaft, and all the various workings of the Colorado Central people, showing also the Gates shaft. Starting into the top of the Bell shaft here, and enter the Bell shaft, and f'owing down on this line at this point, you come to what is known as the Grace cross-cut. That goes north and connects with the Colorado Central workings. That cross-cut was run by the Colorado Central people; no, by the Equator people still further down. The ore separates, as seen in there and shown on the Johnson's map, and then you go down speedily, the Bell shaft proper following the dip or slip of ore that goes off to the extreme north, and will angle or go on the Marshall-tunnel level. The southern prong of this, which is stoped from the 360-foot level and connects with the 300-foot level, and so on down to the 360-foot level. These marked lined with black were run by the Colorado Central, and with white by Equator people. The next one in reality shows the Gates
206 shaft; well, it shows the Gates shaft with its connections, and the last one is the raise carried up on the Equator foot-wall up to this point, when it bends over and the foot-wall is represented; here are connections made across Colorado Central work, and here at the 300-foot level shows two sinks, this right one made by the Equator people, *and this other one made by Equator people*, and this other one by the Colorado Central people. This may be vertically 9 feet, and subsequently came and followed therein. They did not follow it, because they went there subsequently off in this position, and subsequently followed the vein. Here this is in gneiss rock; here a good vein of ore dipping to the south and forming a junction with the Equator workings. I would not be surprised if they came together going down. Ten feet ought to bring them together, except that one is a little west of the other; it would perhaps require a drift of 3 or 4 feet to connect them. The level below the top of the engine shaft is
207 the Hunter tunnel. This is the 360-foot level at the bottom of the engine shaft. The other is the 300. This one is on the ore streak, and I say it is the same found higher up. Suppose this to be the (illustrating on blackboard) top of the engine shaft; now, when you get down 300 feet, the projection this way separates you; now, if you draw a level immediately towards you, form a projection out there, since you go 60 feet deeper down a hole, you see they are the distance

apart that this point would be south of that point; it is the dip of the vein. This projection from that point represents the underlay to the engine shaft; that is as far that the bottom of the shaft is horizontally away from the top of it by reason of the underlay or dip; it is the same with the Bell shaft. They represent a departure from a vertical. I am not acquainted with the surface of the Equator. We find the ore-veins about 150 feet below is the first; the others are old workings and inaccessible, so far as I know. I think all these
208 horizontals and workings are on the same vein that I find 150 feet below. The casings of the vein which has been passed, the gangue where it is broken through is gneissed rock. I believe those different levels, horizontal workings, lie upon the foot-wall, that is, the south wall. That wall has been exposed only at two points that I recollect of there. The 360-foot level is driven on the same vein, found 150 feet from the surface; the same vein that comes to the surface, so far as I had opportunity to examine it. It breaks into the Bell shaft. The workings from a point on the Marshall tunnel on the Equator workings, to the extreme west, is driven on the same ore measure or vein of the lode. The principal vein or ore measure is on the Equator workings, because there is a continuous vein, that is, almost continuous, and carries a large body of ore from the engine shaft away beyond the workings on the Colorado Central. The pay mineral vein is found oftener on the walls than otherwise. I don't think they occur
209 on one wall oftener than on another. These small vertical veins that I have testified about are feeders in their downward course. Taking the 300-foot level, that red line running from here to here, it is on a continuous vein; don't know where it was first found, but you see it in the engine shaft, and you follow it down in the 360-foot level; I believe it to be the same vein in the engine shaft. In the Bell shaft it is the same continuous vein found in the Bell shaft by this south streak of ore, and which will form a junction at some point below. The 360-foot level is on the same vein and driven along the casing of the wall, that is, there is a good body of ore matter that lies immediately in contact of the ore which lies on the foot wall south.

On cross-examination Hal. Sayre testified as follows, to wit:

There is no difference in the maps, merely a difference of the
210 plan. This map does not show quite as much as the other map. It does not show the Harris shaft. The scale is 20 feet, same as the other. I have examined the discovery of the Colorado Central; not at this survey, but since the controversy commenced. I think last January I found the discovery in the vein from the top to the bottom at a depth of almost 96 feet. It is wholly in crevice matter. The gneissic wall is not exposed. It is sunk on a seam or slip. It would very near indicate the dip of the lode. I examined the engine shaft about the same time last January. In the engine shaft the vein dips from a point about 50 feet below. That vein has been developed. It is carried down westward, and forms what is called the Thompson ore-streak out here. I think it has been sunk on by the Gates shaft. This is the top of the engine shaft, and the vein runs all the way down the foot-wall. It is about 400 feet deep; follows the vein all the way down. I went
211 down about 50 feet. I don't know whether there are any down there. I drew this map from information given by others. I can't say exactly what the space is between the two levels. I have examined it at the Thompson tunnel. They both show these, and there it is 43 feet between them. I can't tell what the material is between them.

I don't know what the limit of this piece of ground is; don't know where they come together at the 360-foot level; they are approaching there. The only shafts I examined is the engine, discovery, and Bell shafts. When I first examined the Bell shaft it was about 120 feet deep, with crevice matter at the bottom. I found ore in it, ore-streak about 80 feet from the surface. There is a cross cut to the south which shows, I believe, country rock, and a cross-cut to the north wholly in crevice matter. At 120 feet in the Bell shaft there was ore; don't know where they first struck it in that shaft. The ore-streak *streak*, when I saw it was
212 about 2 or three inches wide, dipping to the north at an angle of about 25° from vertical, nearly three hundred feet deep; it is nearly continuous 300 feet in the Bell shaft; found crevice matter in it all the way; don't know that there is a continuous ore-seam all the way; the ore is scattered more or less all the way through; I don't think there is a continuous ore-seam in the Bell shaft. I don't know when the application was made for injunction in this case. I was here as a witness before the Bell shaft has been sunk 80 feet; since that time it has not connected with the Colorado Central that I know of; it is pretty near; it was not sunk by my advice; I may have said it would be better; but I don't know that I advised them in any respect; I believe I expressed an opinion to that effect. The Bell shaft has two seams of ore.

I never said to them that they would have to sink this shaft
213 deeper in order to cut out the Colorado Central. I first found these two veins in the back stope in the 100-foot level, 200 feet from the surface; they are not together there; here is a little cross cut, but the veins are gradually approaching each other; they are 16 or 17 feet apart there; if that stope was continued right out they would come together in the vicinity of this point in the shaft; but there is a cross-cut right there; they come together as they go up, and diverge as they go down, at an angle of about 15°, probably. The vein has been followed up from the 360-foot level; the distance between the veins in the 360-foot level is about 50 to 55 feet, with crevice material between these two points. The width of the lode at that point is about 50 feet. The whole width of the lode at the Marshall tunnel between the Equator and Colorado Central veins is about 85 feet; I have not examined them east of that point. Taking this map here with the scale given, the distance between the Equator vein and shaft No. 3 east, would be 125, 130, 140 feet. It is not necessarily the case that all this space between should be crevice matter to constitute one lode; a horse
214 or broken ground might occur there. I don't know what it is in there; I can't say whether it is or not one lode at this point. I have examined it in the Marshall tunnel, and believe it to be all crevice matter through there. I have heard of the Square and Compass lode; never saw it; I think it is another ore-seam of the same lode. I said the lode dips 20° from a perpendicular; I took the dip from the ore-seam and foot-wall; the rock is gneissic. I examined the Thompson tunnel; gneissic at the head and at the lower level porphyry; the character of the rock changes; on the top they are both gneissic, not exactly on the north wall. The material usually between the ore is a clayey material, generally composed of feldspar, decomposed feldspar, and a little quartz mixed with it; that is what is called the casing. In this case that casing runs up to 8 feet in thickness on the north side. In some lodes it has just the mere seam; it has a corresponding dip with the wall rock. I saw ore in the 300 & 360-foot levels, a continuous seam or vein scattered all through; I did not see a continuous vein
215 all through; I saw crevice matter all through interspersed with

bodies of ore. I arrived at the dip of the vein in the Bell shaft by the incline from the top of the shaft; I took it from the shaft itself. I said that the Equator was the main ore-seam, for this reason; that from what I can learn, the Marshall tunnel was driven with a comparatively barren vein from the point we leave the Marshall tunnel level, until it reaches the manhole, where the two levels approach the 360-foot level; the Equator carries a large amount of ore, and there have been stopes carried up for a long distance, in some place from 150 to 200 feet long, showing almost continuous ore; and, indeed, there is a stope carried from almost this point that shows one continuous unbroken body of ore. I don't mean to say that it is continuous lengthwise in one continuous string of ore without breaks at all starting from one side or the other away laterally commencing way on the other from this point about here to this point and with intermediate stopes in here and a large amount has been taken out near the Marshall
216 tunnel level was nearly barren, was almost wholly barren, up to that joint and beyond until you get some 18 or 20 feet, and there the seam of ore come in, and the ore has been found west of that point, I believe that to have been for this reason: the ore-vein which is followed by the Equator here has greatly fallen over, because down to this point. they struck the ore-vein carried down in the north prong. When I talk about the crevice matter it is all the lode. When I talk about ore-vein I say it is the main ore-vein, because it is more continuous and carries, to my knowledge, a greater body of ore than the other. I believe there is more on the south side than on the north side, on the vein occupied by the Colorado Central. From the Marshall tunnel to that point does not show *does not show* that there was any ore of any kind taken out in here; from examination of the 360-foot level from that point to that point, shows that there was a large amount of ore taken out. If there was no pay, supposing the case, taken out of the 360-foot
217 level than the corresponding level on the Colorado Central, I would not have any better opinion of it than the Marshall tunnel, but that is not a fact; I know that in the 360-foot level, from the manhole you can go east 100 feet in continuous ore; that is, in the stope from the level. I saw it myself; it was a foot wide in some places; the ore is being stoped out back of the 360-foot stope. I never saw the level workings. I don't know that for 125 east from the manhole that there is or has been no ore found. I don't know whether the Marshall tunnel came into the Equator workings, and they always claimed a vertical vein. There is a vein instead of the one they claim that goes from the Equator into the Marshall tunnel level, because it has the dip of the vein; then you go 44 feet east, and there is a vein or seam of ore going through into the Marshall tunnel level. The veins west of the manhole is, perhaps, stronger in mineral. The vein in the level
218 360 is worked 300 feet west of the manhole. This is the parallelogram of the Equator. These are the end-lines here on the surface. I don't know that the vein departs from the side-lines. The Harris shaft is about 700 feet east of the Bell shaft. Don't know where the lodes come together at these points. I have my opinion. On the Marshall tunnel extreme western workings as to the narrow distance of 300 or 400 feet, that is about 600 feet. The length of the Equator location is 1,400 feet, the Colorado Central 1,500 feet. The north and south walls on the Marshall-tunnel level, I should judge to be almost 100 feet apart. This porphyry wall does not come to the surface. I don't think the vein or lode is 300 feet wide anywhere.

On redirect examination Hal Sayr testified as follows, to wit:

I know of no development connecting the Harris shaft with any other workings. There is no evidence that to the east it is on any ore-
219 measure that any of the other workings are on. In developing a mine they run levels. First they sink a shaft, and then, as a general thing, every 60 to 100 feet drive openings in the mine for the purpose of opening it horizontally; then, where there is ore, they commence to carry up the stope with a platform, called the stull; the barren rock is left in the stope, and so on keeping in the back or roof of it all the time, so that the ore is broken, so far as it is worth breaking, and then carried out for milling purposes. This does not take place when there is no ore to be saved. The stoping down here is not accessible; there is one continuous stope of not far from 100 feet in length, running about 100 feet west and about 200 feet east of the Bell shaft, and between the engine shaft and that point. I know of no stope on the Marshall-tunnel level; there is a stull in here 20 to 40 feet long and a little stope over it; am not sure of the amount; there is no other stope until you pass beyond the manhole; here is a stope
220 carried in this level, but no great extent, 20 to 25 feet high. That stope is just west of the manhole, perhaps 18 to 20 feet west of the manhole; it is carried 20 or 30 feet high, and then passing along on the same horizontal plane; on this level there is a stope carried up 20 or 30 feet high. The distance from the Marshal tunnel to the manhole is about 400 feet; of that distance the stope I speak of is about 40 feet.

On recross-examination Hal Sayr testified as follows, to wit:

This stope I was speaking of west of the manhole connects with something. I don't think it is carried as high as the 330-foot level. I don't make an absolute connection. I don't think it was over 25 or 30 feet high. I do not know that you were enjoined from stoping at this point. It is not right at the end of the Grace cross-cut, it is 70 or 80 feet from the end of the Grace cross-cut. I am talking of the ground east of the bottom of the Gates shaft, entirely east, I think, that correctly represents the stope.

221 The defendant to further maintain the issues in its behalf, here introduced the witness WESLEY A. HUNTER, who, being duly sworn, testified as follows, to wit:

I am a miner; been a miner almost 18 years. I know the Equator lode; know it since 1866. I have worked on it off and on since 1867. I am familiar with all the workings that was made up to 1st of last January. I know the Colorado Central. I know the engine, discovery, west, and Bell shaft on the Equator. I have been in them all. I know the 300-foot level, with exception of what has been done in it since last January. I think it has been carried something like 400 feet since last January. These shafts I have spoken of are all sunk on the vein or crevice of the lode; generally they are on the wall, I think the south wall. I am acquainted with the 360-foot level, and know it for the distance of something over 400 feet west from the Marshall tunnel. The 300-foot level was driven on a vein of ore mostly. There is ore
222 for the entire distance out, and in some of the places there is not any, but most of the way there was a continuous ore measure all through these different shafts and levels. There are some places where there is no ore, but the ore vein going on so that you can distinguish it all the way. There is gangue on the south wall, on the 360-

foot level, the entire distance. I think miners always consider that the best indication of following a vein is the continuity—the fact of the gangue streak continues all the time. I think mineral occurred within a foot of the surface in the discovery shaft. There was mineral in all these shafts near the top the surface; all these shafts have got the vein mineral generally; there is a small vein of mineral in each one of the shafts from the top down so far as I know. I ran some cuts at the top of the lode, I think in 1861 or 1862, 1871 or 1872. I mean I run from the discovery shaft out to the Bell shaft; several of them probably from 20 to 25 feet to strike the top of the vein; to show it, at least 5 or 6 cuts between these shafts.

223 Direct examination, Wesley A. Hunter continued:

I know what is called the Thompson streak in the Colorado workings; the top of it terminates on top in near the engine shaft and discovery shaft on the Equator lode; it connects into the Equator about 65 feet from the surface, and pitches off to the north as it leaves it. It leaves the Equator, side-lines on its dip, about 60 to 65 feet from the surface at a point east of the Thompson tunnel and engine shaft; it is broken there, and raises and then goes back into it again. The model shows it very well. Here is the engine shaft, comes in it, goes right into the northwest corner of engine shaft. The course of the Bell shaft is dipping to the north and going on a downward course. It has been opened below the Thompson tunnel. It follows the same course below there so far as I know; don't know it any lower than that.

224 On cross-examination witness testified as follows, to wit:

This represents the engine shaft of the Equator lode; there was a stope in here, it is worked 150 feet; I don't know which represents it in the engine shaft runs west some 150 feet and then it is stoped clean up to this point, up within 60 to 75 feet from the surface. From this sheet of glass the level runs in about 150 feet; it is what we call the 150-foot level in working the mine. This drift runs from the engine shaft here, out here about 150 feet, and then the ground is stoped out in this position and some way comes back; this point runs up here to the engine shaft. It comes up within, I should say, 65 feet of the surface of the ground; 65 to 75 feet below the surface we find another they strike along here; it is different from the other streak. The other one dips a little to the north. I can't tell what the difference is between the two. I know one dips considerbly more than the other. The way I establish the fact that the same streak found in the Equator discovery shaft is identified with
225 the Thompson tunnel is that there is a drift right through. There is a connection between the Colorado Central workings and the Equator, and others, goes all the way. The identity of the particular streak found in the Equator, discovery and Thompson tunnel can certainly, it is plain to be seen; it is worked out. Here is the discovery shaft of the Equator; this stope goes clean from the engine shaft to the discovery shaft; this streak comes in between them in this stope and this ore-streak from the Thompson tunnel forms a connection here; this stope is stoped out all along in here. This streak comes up and connects the whole thing together; now this ground is stoped out not only shifts but breaks through into the engine shaft right here again; I have said to you two or three times that it comes here and goes there to the Thompson tunnel. There is another streak goes off here, there is an ore streak down here.

The defendant to further maintain the issues in the behalf here in-

troduced the witness GEORGE W. COX, who, being duly sworn, testified as follows, to wit:

226 I am a miner and have been for about 18 years. I was one of the inspectors appointed to examine these mines. I know the Equator lode—the engine discovery, west and Bell shafts, and know the different levels, commencing at the engine shaft to No. 1, east, and run down for about 100 feet, nearly vertical all the way down the shaft for as far as I have been that is the 360-foot level from the top, there is one solid, continuous body of crevice matter or the gangue, with ore in places the entire distance down. There is a level that is called the 150-foot level that runs west of the discovery shaft, or engine shaft for about 150 feet; I should judge on that shaft, or that drift, level is run on the foot-wall or by departing between the crevice matter to the gneissic rock and makes the connection with the discovery shaft on the Equator lode. The top of the discovery shaft, as I saw several years ago, before it was timbered up or anything to prevent seeing, in the fall of 1868, from the top of

227 that showing a prominent outcrop with a wall. The shaft was then down 15 feet, if I remember rightly; then down engine shaft to the 300-foot level that runs west between 500 to 600 feet through that entire distance, carried gong'e with ore nearly the entire distance; well, in fact, it was the entire distance, and ore is found all the way. Then down the discovery or engine shaft, 60 feet deep, is what is called the 360-foot level; that is run about the same distance as the 300-foot, and that has been run the entire distance on the south wall; there is no north wall in any place, shape, or form, in any way that I can find at this level. On the Colorado Central development there is an ore-vein running from the Marshall tunnel level in to a point about there (referring to No. 5 level), and then 150 feet to this manhole, there is not a particle of ore to be found in here. This level seems to be driven approximately through the gangue matter. I followed the gangue through in this direction because there is evidence showing a wall of porphyry 18 feet wide and above

228 the granite formation; granite above there. Here is the rock to be found there. There is a body of porphyry to be found there, and also that is the place I have succeeded in discovering any north wall, or what is represented as the north wall in the plaintiffs' workings. The vein followed by the Colorado Central is not continuous with walls. There is no wall in the Colorado Central at all, except as here, north wall, where they run their cross-cut out here. There is in the crevice more or less horses or wedges; that is, a part or portion of the wall rock, but still it has no connection with the main wall rock. There you will find in every large veins the crevice rock consisting of schist rock, shale, and decomposed quartz. The main and principle ore-measure, the most continuous large body, has been on the south wall the whole distance I have seen in that mine. The smaller veins within the lode are called feeders of the ore-streak—of the main streak; they are ultimately absorbed by the larger one.

229 On cross-examination George W. Cox testified as follows, to wit:

I first ran the 360-foot level on the Equator about the middle of last December. The depth is between 300 & 400 feet; can't say how much ore was taken out. The 300-foot level is the same distance; I know there was a large amount of ore taken out of this level. I do not know that most of the pay taken out of the Equator lode was taken out east

of the Marshall tunnel. I don't know whether it was so or not. I said there was a large vein in the 360-foot level; it is about 2 feet. I have seen it for a distance of 20 to 25 feet. I find the ore pinches up and opens out; it pinched out to 2 inches wide, and in places it would pinch to 5 or 6 inches. I mean to say from this point 20 feet west of the engine shaft commenced a streak of ore where it lays from three up to 10 inches, extending 156 feet steady vein. The ore is scattered in bunches and spots, and a miner or anybody knowing anything about ores can trace it as a vein measure. I judge the distance of the
230 broken-up space is about 200 feet. The ore in that drift was scattered. I did not mean you can find a continuous ore-streak the entire distance in either the Colorado Central or Equator; in any portion you can find a body of ore that has a continuous run of say 150 to 200 feet along, but it scatters, and will eventually come in in places. That lode has walls to the south. The ore-bodies are scattering. In large fissure veins like this is said to be, you will find ore bodies distributed all through, sometimes on one wall and then on the other. The ore is running in bunches, scattered all through, and there are little streaks connecting these ore-bodies. The ore in the Equator level east of the manhole I don't think was very strong; don't know whether the ore was saved or not, and don't know what was taken out. I examined east of the discovery shaft of the Equator last winter. I claim there is a body of mineral that runs clear through, and this is all crevice up here. The north wall, the only place I can find it, is in
231 the Marshall tunnel right here; the porphyry casing is about 15 or 18 feet; that is the only place I can find the north wall showing distinctly, and then occurs this granite formation. I would call the wall porphyry because I don't think there is anything in the porphyry. I think the width*e* of the porphyry is about 70 or 80 feet. Going west and taking the country rock, I should judge the width to be the same. The porphyry does not play out going west. I say the porph'y is found here. Then over there is the only point in the whole lode where this cross-cut has been put to *to* demonstrate that fact. I did not see granite to the west. I say the only point where the granite is visible is in the Marshall tunnel, because it runs beyond and shows what it is. I call the north wall porphyry.

232 The defendants, to further maintain the issues on its part, here introduced JAMES NOLAN, who, being duly sworn, testified as follows, to wit:

I know the Equator lode and the Thompson ore-streak. It is first found at the top, 72 feet down the engine shaft. Between that point and the discovery shaft on the Equator there is a back stope, connecting out. The Thompson streak comes in the engine shaft there; it makes in from the north on an upward course, at about the angle shown there. I have been below on the workings. I run a cross-cut from the engine-shaft at a depth of 112 feet to the Thompson streak. I ran a distance of 54 to 56 feet to strike it; the dip of the streak was about the same as above. I did not follow it down. From the top of the stope I followed the Thompson ore-streak a distance of 70 feet. The Nolan shaft is on the Thompson tunnel; that I think is about 100 feet from the surface; we sank that shaft 30 feet on the ore-streak,
233 the Thompson-streak. It appeared to have the same dip as in the other workings. The thickness of the ore-streak in the Nolan shaft was from one to two inches. It was plainly traceable out, and down as far as the Nolan shaft, and in the shaft.

The plaintiffs, to further maintain the issues in their behalf, here called the witness THOMAS CORNISH, who testified as follows:

I examined the stope above the 300-foot Equator level to some extent, above the Bell shaft. I mean at the point where the windlass is. The streak in the east end of the shaft, the top of it dips to the north as it goes down. It stands parallel with the north wall on the stope. The streak would pass out of the side line if protracted, as shown there at the windlass; it would come up between these two vertical parallel lines there. I did not examine as to where the apex would be. From this point to here at the Bell shaft it does not follow an ore-streak;
234 it is what is called an incline cross-cut, running diagonally across from one streak to another in its downward course.

The plaintiffs, to further maintain the issues on their part, here recalled the witness ALBERT JOHNSON, in rebuttal, who testified as follows:

I have not made a calculation where the dip of the ore-streak would come if protracted to the surface, but it would come out as far north as the ground patented by the Colorado Central. The Bell shaft, from the windlass down to the bottom, I think, goes across the crevice from one streak to another. The Bell-shaft gets into the side lines of the Colorado Central by this cross-cutting about 40 feet. It would be not less than 14 feet north of the south line, keeping the same dip from the surface, from this ore body at the windlass.

On cross-examination, Albert Johnson testified as follows:

I don't know whether that ore-streak occupies the same course in going the distance alone. I used about 10 feet space to take the
235 dip. I said I thought the Bell shaft was carried about 40 feet inside of the Colorado Central. I could not say how much northing that shaft got by cross-cutting; I did not examine. The portion you called my attention to is about 20 feet through the Georgetown district. As a general thing, the average course of the lode would be a straight line, or nearly; it would be a straight line, but that is the average course.

The plaintiffs, to further maintain the issues on their part, here called the witness ERNEST L. FOSTER, who, being duly sworn, testified in rebuttal as follows, to wit:

I am a mining engineer; been one for 7½ years, and been actually engaged during that time. I am the inspector allowed by the court to enter the Bell shaft, at the time while they were sinking from the windlass to its present head. I was in there at least once a week. I inspected it. Finally I observed the work while it was actually
236 being sunk, and before any timbering was put up. They did not follow an ore-streak. They cut across in several places, or gradually went across, I might say. I should think at the first place they cut across they left a space of 5 or 6 feet between the ore-streaks; then from there they cut across again as much where they cut the vein of ore, that extended down the shaft; coming in on the north side, extended down 15 feet and out on the south side; then went right through that, and they sunk the shaft below that point. The vein of ore at that windlass, perhaps a little north of it, if extended up, the apex, would come within the lines of the Colorado Central.

On cross-examination, witness, Ernest L. Foster, testified as follows, to wit:

If the vein did not keep its course up, I can't tell where it would

come. I used 10 feet space to get its course, 200 feet below the surface (witness points out on map the two cross-cuts spoken about),
237 point between 40 and 50 feet down the shaft, where they cut across. Where they first connect they are one and the same, and then at about 60 feet down the shaft from the windlass is where they cut into the streak here, on the north side, as that streak was very nearly perpendicular, and it is about 15 feet in length, when it passed out on the south side of the shaft. (Witness points on map.) This is the course of the shaft as we went down there, and they crossed over on on account of the seams of ore, the casings of the ore veins, as you might call it, dip about perpendicular, or nearly so. That map is about correct, I should say. They crossed there, I said the distance from one vein to the other. They cut across twice, once about 40 feet down, and another one 60 feet down. I mean in sinking that distance they cut two veins. They are vertical, the veins, nearly so. I mean when I say that they run cross-cuts, that they drove the Bell shaft as a cross-cut, not that they put cross-cuts in from the shaft.

238 The plaintiffs, to further maintain the issues in their behalf, here recalled in rebuttal the witness, GEO. W. HALL, who testified as follows, to wit:

I examined the Bell shaft. It was what I call an incline shaft, sunk diagonally through the crevice matter and mineral streaks, without any reference to following a mineral streak. At the bottom it passes through the same streak, which I supposed to be the streak we had worked above there, and also the same streak which they run a cross-cut 54 to 56 feet about 80 feet west of that, and cut into where we made connection with them on the same streak. I saw the streak of mineral at the windlass, just below the platform of the windlass, as it dipped to the south 63°. It would carry it north of our north side-lines at the top outside of the Colorado Central patent. I mean if it kept that dip up it would carry it north if it was continued up. They had just
239 above the raise over the platform here, about 6 feet, perhaps 8 feet, it is about vertical, as it continued up as far as it can be traced. At that point it would come, I think, about 13 feet inside of the south line of the Colorado Central, at that point. When the observation was made it was about 7 or 8 feet.

The plaintiffs introduced deeds to show title of plaintiffs to whatever was granted by the Colorado Central patent.

Which was all the evidence offered by either of the said parties.

Defendant submitted to the court, in writing, the several instructions or prayers, marked 1, 2, 3, 4, 5, 6, 7, &c.

The defendant then moved the court, upon the evidence aforesaid, to instruct the jury, that if they believe from the evidence that the defendant and John Turck were co-owners of the Equator lode, and
240 as such owners made application on the 14 day of May, 1869, in accordance with the laws of the United States, to obtain a patent therefor, and in accordance with said laws did give the proper notice of the intention to enter said ; that such application was notice to all of what they claimed, and if no adverse claim was filed, or was filed and not prosecuted successfully, and the government issued a patent on such application, any discovery made subsequent to such application, if made on said Equator lode, or any other lode that in its course unites with the Equator within the lines of said location will be held by the owners of the said Equator lode, because of priority of title and location of said lode.

Second. That if the jury believe from the evidence that the Equator lode was discovered and marked by the defendant or its grantors prior to May 14th, 1869, and that at that time the defendant and
241 John Turck, a co-owner with the defendant, made application for a patent to 1,400 feet on said lode in accordance with the statutes of the United States, and that subsequently the government issued a patent on such application, then the title of the defendant must be considered as relating to the time of the application at least, and in effect the patent of the defendant is the senior patent, and that the defendant will take the lode described in the patent; and if the lode of plaintiffs enters and joins with that of defendant, the defendant, by priority of title, is entitled to the lode beyond such junction.

Third. That if the jury believe from the evidence that the grantors of the defendant made a location on what they called the Equator lode, and took 25 feet on each side of what they called center of the crevice, and on the 14th of May, 1869, made application to patent the
242 same under the laws of the United States, and the government did issue a patent therefor under such application, then defendant is entitled to all ore measures, veins, or parts of veins, the apex of which was within the side-lines of said patent, unless the same was held adversely to the defendants on or before the 10th day of May, 1872; and if said lode on which the defendants' grantors was more than the width of the surface ground allowed by local laws, to wit, 25 feet, still the defendants would be entitled to such ore-measures or vein as had the apex within the said side-lines, and have the right to follow the same on the downward course, although such veins or ore-measures may so far depart from a perpendicular in the course downward as to extend outside the vertical side-lines of said surface location.

Fourth. That if the jury believe from the evidence that the grantors of the defendant discovered the Equator lode so-called and worked and mined therein, and subsequently defendant obtained a patent
243 from the Government of the United States to the said Equator lode, the defendant is entitled to all the ore-measures the apex of which are found within the side-lines of the said patent of the Equator lode, and of the said ore-measures, departing from a perpendicular in their course downward so as to extend outside of the vertical side-lines, the defendant may follow such ore-measures outside of the vertical side-lines to any depth of said ore-measure, if said ore-measure was not held adversely to defendants or their grantors on or before May 10th, 1872.

Fifth. That if a miner goes on a lode or ledge and makes a location thereon according to law, and because of the width of the lode does not by his surface lines cover all the apex, still he will be entitled to the possession of that part of the lode so claimed by him, and his right to that part of the lode, the apex of which is within his side-lines is the same as it would have been if the surface had covered the entire apex of the lode.

244 Sixth. That if a miner makes a location on a lode or ledge, and by mistake does not by his location include the whole apex or top of said lode or ledge, yet he will be entitled to hold so much of the said lode or ledge as is within the side-lines of his surface location, and of the veins within his side-lines which shall depart from a perpendicular in its downward course as to extend outside of the vertical side-lines he may follow the same.

Seventh. That the surface land taken up in connection with a linear location on the ledge or lode is under the act of 1866 solely for the conven-

ient working of the mine, and does not measure the miner's right to follow the dips, angles, and variations of the vein.

Which instructions, & each and every of them, respectively numbered 1, 2, 3, 4, 5, 6, and 7, the court refused to give to the jury, and the defendant then & there excepted to the refusal of the court to give the said instructions, or any one of them.

245 Thereupon the court, upon its own motion, charged the jury:

That there is introduced, both by plaintiffs and defendant, evidence tending to prove that the claims of both parties are located on the same vein or lode of mineral-bearing rock in place, the general apex or upper surface of which is about one hundred feet wide.

If the jury believe this to be true, then I instruct you as the law of this case, that plaintiffs have the prior title from the United States to that portion of this lode within the lines of their patent, extended vertically downwards to the earth's center; and the defendant, having contested plaintiffs' right to run a patent for the grounds of the lode in controversy in the court of the Territory, according to the act of Congress on that subject, and failed in that contest, and having accepted and read in evidence a patent for their own claim which expressly excepts out of its granting clause the interfering part in plaintiffs' said patent, the law of the case is for the plaintiffs, and they are en-

246 titled to all the mineral found within the side-lines of their patent extended vertically downward.

(To which charge of the court, and the whole thereof, and each clause that as given the defendants then and there duly excepted.)

And thereupon the jury gave their verdict against the defendant.

Whereupon the counsel for defendant filed the following motion for new trial, as follows, to wit:

And now comes the defendant, by its attorneys, and not waiving its right to a new trial, under the statutes of Colorado, but because of error on the trial of the cause, moves the court to set aside the verdict in this case and grant a new trial for the following reasons:

First. Because the court erred in rejecting the evidence of the defendant.

Second. Because the court erred in admitting the evidence of the plaintiff.

247 Third. Because the court erred in instruct*ed* the jury.

Fourth. Because the court erred in refusing to instruct the jury as requested by the defendant.

Which said motion for new trial was refused by the court; to which the defendant then and there duly excepted.

And thereupon the court rendered judgment on said verdict in favor of the plaintiffs and against the defendant, and the defendant, by its attorneys, then & there excepted to the rendering of said judgment.

And afterwards, after the refusal to grant the motion for new trial as aforesaid, the defendant, by its attorneys, paid all costs in said case, and moved the court for a new trial under the provisions of section 254 of the code of civil procedure of Colorado.

On which question the opinions of the judges were opposed; whereupon, upon motion of the defendant, the following certificate of division was duly signed in words and figures following:

248 STATE OF COLORADO,
County of Arapahoe:

In the circuit court of the United States, district of Colorado.

GEORGE W. HALL AND CHARLES H. MARshall
vs.
THE EQUATOR MINING AND SMELTING COMpany.

This was an action for the recovery of the possession and determination of the title of certain real estate, to wit, 1,500 feet in length by fifty feet in width on the Colorado Central lode. At December term, 1878, of said court the case was submitted by agreement of parties for trial by the judge of this court, and on such trial a judgment was rendered by the court in favor of the defendant and against the plaintiffs; and thereupon the plaintiffs paid the costs of such suit and moved the court to vacate said judgment and grant a new trial without showing cause under the provision of section 254 of the code of civil procedure of Colorado.

249 That motion was granted, and a new trial awarded the plaintiffs without error being alleged.

And at the May term, 1879, the cause coming on to be heard, was submitted to a jury for trial.

The verdict was for the plaintiffs.

And afterwards, to wit, on the 15th day of July, 1879, a judgment was rendered on said verdict in favor of the plaintiffs; and after the rendition thereof and on the same day, the defendant having paid all costs recovered by said judgment, by H. M. and W. Tellers, and G. B. Reed, its attorneys, moved the court to vacate said judgment and grant a new trial to the defendant under the provisions of section 254 of the code of civil procedure of Colorado.

And thereupon it occurred as a question,

Whether the defendant, having paid all costs recovered by said
250 judgment, it is entitled to have said judgment vacated, and a new trial in said cause under the provisions of section 254 of the code of civil procedure of Colorado, without showing cause.

On which question the opinions of the judges were opposed, and thereupon the said motion was by the court denied.

Wherefore, on motion of the defendant, by the attorneys, H. M. & W. Tellers, and G. B. Reed, that the point on which the disagreement hath happened may during the term be stated under the direction of the judges and certified under the seal of this court to the Supreme Court to be finally decided:

It is ordered that the foregoing question on which the disagreement of opinion hath happened, which is made under the direction of the judges be certified, according to the request of the defendant, by its attorneys, and the law in the case made and provided.

SAM. F. MILLER.
MOSES HALLETT.

251 And inasmuch as the matters aforesaid do not appear of record the counsel for the defendant presents this bill of exceptions, and

prays that the same may be signed and sealed by the court and made a part of the record in said cause.

And it is done accordingly.

Approved Sept. 10, 1879.

MOSES HALLETT.
SAM. F. MILLER.

This is the first time I have ever signed such a voluminous bill of exceptions, and it is wholly unnecessary. But it is presented to me at Washington two months after the trial as approved by the counsel on both sides, and the judge who sat with me. While compelled by the circumstances to sign it, I do it under protest and as not to be drawn into a precedent.

SAM. F. MILLER.

Examined Sept. 27, 1879, & found correct.

R. A. MORRISON,
Att'y for Pl'ffs.

Filed Sept. 29th, A. D. 1879.

252 And theretofore, and on, to wit, the day of July, A. D. 1879, came again the said defendant, by Willard Feller, esq., its attorney, and sued out of said court and in said cause its writ of error and citation to the Supreme Court of the United States.

And the said writ of error is attached hereto, as follows, to wit:

253 *Writ of error to circuit court U. S. district of Colorado.*

THE UNITED STATES OF AMERICA.

UNITED STATES OF AMERICA,
District of Colorado, ss:

The President of the United States to the judges of the circuit court of the United States for the district of Colorado, greeting:

Because in the record and proceedings, as also in the rendition of the judgment, of a plea which is in the said circuit court, between George W. Hall and Charles H. Marshall, and The Equator Mining and Smelting Company, a manifest error hath happened, to the great damage of the said The Equator Mining and Smelting Company, as by their complaint appears: We being willing that error, if any hath been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington, on the 2d Monday of October next, in the said Supreme Court to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the law and custom of the United States should be done.

Witness the honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, this day of July, in the year of our Lord one thousand eight hundred and seventy-nine, and of the Independence of the United States, the 104th year.

[SEAL.] EDWARD F. BISHOP, *Clerk.*

Allowed by—

MOSES HALLETT,
District Judge.

254 *Return.*

THE UNITED STATES OF AMERICA,
District of Colorado, ss:

In obedience to the command of the within writ, I herewith transmit to the honorable Supreme Court of the United States, a duly certified transcript of the record and proceedings in the within entitled case, together with all things concerning the same.

Witness my hand and the seal of said circuit court at Denver, in said district, this 2d day of Oct'r., 1879.

EDWARD F. BISHOP, *Clerk*,
By , *Deputy Clerk.*

(Indorsed:) Gen. No. Supreme Court of the United States. The Equator Mining & Sm'lt'g Comp'y, plaintiff in error, vs. George W. Hall and Chas. H. Marshall. Writ of error to circuit court U. S., district of Colorado. Filed in court of the U. S. this day of A. D. 18 . , clerk. By , deputy clerk. , attorney for plaintiff in error.

255 And the said citation is attached hereto as follows, to wit:

256 *Citation U. S. circuit court.*

THE UNITED STATES OF AMERICA,
District of Colorado:

The United States of America, to George W. Hall and Charles H. Marshall, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, to be holden at the city of Washington, on the second Monday of October next, pursuant to a writ of error filed in the clerk's office of the circuit court of the United States for the district of Colorado, wherein The Equator Mining and Smelting Company is plaintiff in error and you are defendants in error, to show cause, if any there be, why the judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the honorable Moses Hallett, judge of the circuit court of the United States for the district of Colorado, this day of July, in the year of our Lord one thousand eight hundred and seventy-nine.

MOSES HALLETT, *Judge.*

257 *Proof of service.*

THE UNITED STATES OF AMERICA,
District of Colorado, ss:

On this 29th day of August, A. D. 1879, personally appeared Charles W. Bishop, before me, the subscriber, a clerk of the circuit court of the United States for the district of Colorado, and makes oath that he delivered a true copy of the within citation to Hon. James B. Belford, one of the attorneys of record of the said plaintiff, on the 29th day of August, A. D. 1879.

CHARLES W. BISHOP.

Sworn to and subscribed before me this 29 day of Aug't, A. D. 1879.
[SEAL.] EDWARD F. BISHOP, *Clerk*,
By , *Deputy Clerk.*

(Indorsed:) Gen. No. court of the United States district of Colorado. The Equator Mining & Sme't'g Co., plaintiff in error, vs. Geo. W. Hall & Chas. H. Marshall, defendant in error. Citation. Filed in court of the U. S. this day of A. D. 18 . , clerk. , deputy clerk. , attorney for plaintiff in error.

258 *Clerk's certificate.*

UNITED STATES OF AMERICA,
District of Colorado, ss:

I, Edward F. Bishop, clerk of the circuit court of the United States for the district of Colorado, do hereby certify the above and foregoing to be a true, perfect, and complete transcript and copy of the record and proceedings in a certain cause lately in said court pending, wherein George W. Hall et al. were plaintiffs and The Equator Mining and Smelting Company were defendants, as fully and completely as the same still remain on file and of record in my office.

In testimony to the above I do hereunto sign my name and affix the seal of said court at Denver, in said district, this 3d day of October, 1879.

[SEAL.] EDWARD F. BISHOP, *Clerk.*

Clerk's fees: Transcript, 624 fol. & c't'f., $62.75. Paid by H. M. & W. Teller for Equator Co.

(Indorsement on cover:) No. 321. The Equator Mining and Smelting Company, plaintiff in error, vs. George W. Hall and Charles H. Marshall. Colorado C. C. U. S. Filed 11th October, 1879.

OFFICE SUPREME COURT U. S.
FILED
OCT 21 1882
JAMES H. McKENNEY, Clerk

IN THE

SUPREME COURT

OF THE

UNITED STATES.

THE EQUATOR MINING AND SMELTING COMPANY,
Plaintiff in Error,

vs.

GEORGE W. HALL, AND CHARLES H. MARSHALL,
Defendants in Error.

Writ of Error from the United States Circuit Court, District of Colorado.

BRIEF OF PLAINTIFFS IN ERROR.

Statement of Facts.

This action was brought against the defendants in error, in ejectment, in the Circuit Court of the United States, in the District of Colorado, to recover certain property on the Colorado Central lode.

The cause was brought on for trial before the said Court on the 18th day of January, 1879, which trial resulted in a judgment for the defendants in said suit, The Equator

Mining and Smelting Company. Whereupon the said plaintiffs, having paid the costs in accordance with the Statutes of Colorado, moved the Court for a new trial.

Whereupon the plaintiffs filed an additional count to their complaint against The Equator Mining and Smelting Company, and a trial was had on the original complaint and the additional count in said Circuit Court at the May term thereof, to wit: July, 1879, which trial was had before a jury, and resulted in a verdict of judgment for the plaintiffs in said cause, George W. Hall and Charles H. Marshall, against the defendants, for the recovery of the said property on said Colorado Central lode.

Thereupon judgment was entered on the said verdict, and the said defendant, The Equator Mining and Smelting Company, having paid all the costs in the said cause, in accordance with the Statutes of the State of Colorado, moved the Court to vacate the judgment in said cause and grant a new trial, claiming the same by virtue of the Statutes of the State of Colorado in such cases made and provided, and thereupon the Judges, being divided in their opinion in respect to the question thus presented as to whether a new trial should be granted under the statute, a certificate of division was entered in said cause, which is in the words and figures following, to wit:

STATE OF COLORADO, }
County of Arapahoe. }

In the Circuit Court of the United States, District of Colorado.

GEORGE W. HALL AND CHARLES H. MARSHALL,
vs.
THE EQUATOR MINING AND SMELTING COMPANY.

"This was an action for the recovery of the possession and determination of the title of certain real estate, to wit: fifteen hundred feet in length by fifty feet in width on

the Colorado Central lode. At December term, 1878, of said Court, the case was submitted, by agreement of parties, for trial by the Judge of this Court, and on such trial a judgment was rendered by the Court in favor of the defendant and against the plaintiffs; and thereupon the plaintiffs paid the costs of such suit and moved the Court to vacate said judgment and grant a new trial without showing cause, under the provisions of section 254 of the Code of Civil Procedure of Colorado.

"That motion was granted and a new trial awarded the plaintiffs without error being alleged.

"And at the May term, 1879, the cause coming on to be heard, was submitted to a jury for trial.

"The verdict was for the plaintiffs.

"And afterwards, to wit: on the 15th day of July, 1879, a judgment was rendered on said verdict in favor of the plaintiffs; and after the rendition thereof, and on the same day, the defendants having paid all costs recovered by said judgment, by H. M. and W. Teller, and G. B. Reed, its attorneys, moved the Court to vacate said judgment and grant a new trial to the defendant under the provisions of section 254 of the Code of Civil Procedure of Colorado.

"And thereupon it recurred as a question, whether the defendants, having paid all costs recovered by said judgment, it is entitled to have said judgment vacated, and a new trial in said cause under the provisions of section 254 of the Code of Civil Procedure of Colorado, without showing cause.

"On which question the opinions of the Judges were opposed, and thereupon the said motion was by the Court denied.

"Wherefore, on motion of the defendant, by the attorneys, H. M. and W. Teller and G. B. Reed, that the point on which the disagreement hath happened may, during

the term, be stated under the direction of the Judges and certified under the seal of this Court to the Supreme Court to be finally decided.

"It is ordered that the foregoing question, on which the disagreement of opinion hath happened, which is made under the direction of the Judges, be certified according to the request of the defendant, by its attorneys, and the law in the case made and provided.

SAM. F. MILLER,
MOSES HALLETT."

And thereupon the motion to vacate the judgment and grant a new trial was refused, in accordance with the opinion of the Judge presiding, the Hon. Samuel F. Miller, and the plaintiff in error having sued out its writ of error thereon, brings the case to this Court.

ASSIGNMENT OF ERRORS AND BRIEF FOR PLAINTIFF IN ERROR.

First—The Court erred in overruling motion for a new trial, as set forth in a certificate of division, filed herein.

Sec. 254 of the Civil Code of Colorado, in force at the time of the trial of said cause, is as follows:

"Whenever judgment shall be rendered against either party, under the provisions of this chapter, it shall be lawful for the party against whom such judgment is rendered, his heirs or assigns, at any time before the first day of the next succeeding term, to pay all costs recovered thereby, and, upon application of the party against whom the same was rendered, his heirs or assigns, the Court shall vacate such judgment, and grant a new trial in such case, but neither party shall have but one new trial in any case, as of right, without showing cause. And, after such judgment is vacated, the cause shall stand for trial the same as though it had never been tried.

"And in case possession may have been recovered under the action for possession or title, brought or prosecuted under the provision of this chapter, the plaintiff may bring his action for the rents and profits thereof, and in such action the measure of damages shall be the same as in action of trespass for mesne profits at common law. And, in case such premises recovered be a lode, vein or mining claim, the defendant shall not be entitled to any offset for any timbering, cribbing, improvements or developments made upon the same, neither shall the damages be abated or lessened by reason of such improvements or developments."

This section is in substance the same as that of many other States, to which attention is called.

The State of Illinois has the following provision upon this question:

"At any time within one year after a judgment, either upon default or verdict in the action of ejectment, the party against whom it is rendered, his heirs or assigns, upon the payment of all costs recovered therein, shall be entitled to have the judgment vacated and a new trial granted in the cause. If the costs are paid and the motion therefor is filed in vacation, upon notice thereof being given to the adverse party, or his agent or attorney, or the officer having any writ issued upon such judgment, all further proceedings thereon shall be stayed till otherwise ordered by the Court. The Court, upon subsequent application, made within one year after the rendering of the second judgment in said cause, if satisfied that justice will thereby be promoted, and the rights of the parties more satisfactorily ascertained and established, may vacate the judgment, and grant another new trial; but no more than two new trials shall be granted to the same party under this section."

Kansas has the following:

"SEC. 601. The Court rendering the judgment, at any time within one year thereafter, upon the application of the party against whom judgment is rendered, his heirs or assigns or representatives, and upon the payment of all costs and of the damages, if the Court so direct, shall vacate the judgment and grant a new trial. The Court shall grant but one trial, unless for good cause shown."

Indiana has the following:

"SEC. 574. In an action for the recovery of real property, the party against whom judgment is rendered may, at any time during the term at which the judgment is rendered, demand another trial by notice on the journal, and thereupon the judgment shall be vacated, and the action shall stand for trial at the next term.

"SEC. 575. No further trial can be had in such action except upon appeal, unless for good cause shown, as in other actions.

New York has the following, Second Statutes at Large, Sec. 37, p. 318:

"The Court in which such judgment shall be rendered, at any time within three years thereafter, upon the application of the party against whom the same was rendered, his heirs or assigns, and upon payment of all costs and damages recovered thereby, shall vacate such judgment and grant a new trial in such cause. And the Court, upon subsequent application, made within two years after the rendering of the second judgment in said cause, if satisfied that justice will be thereby promoted, and the rights of the parties more satisfactorily ascertained and established, may vacate the judgment and grant another new trial. But no more than two new trials shall be granted under this section."

It will be observed that under the statutes of Illinois, Indiana, Kansas and New York, above cited, the number of trials that may be had under the sections quoted, is restricted, either to one or two, by the express terms of the statute itself, and also restricted in point of time, within which the application for such new trial may be made, and by the statute of Illinois the restriction is not more than two new trials to the *same party*.

The statute of New York, as will be seen, giving three years' time within which application may be made to the Court for such new trial, and providing further, that the judgment shall not be conclusive until the expiration of said time. It thus becomes apparent that in all these States some provision was necessary under the general language of the statute, to prevent such a construction thereof as would allow more than one new trial under the statute itself. As early as 1861, the then Territory of Colorado enacted (Laws of 1861, Sec. 30) as follows:

"The Court in which said judgment shall be rendered, at any time within one year thereafter, upon the application of the party against whom the same was rendered, his heirs or assigns, and upon the payment of all costs and damages recoverable thereby, shall vacate such judgment and grant a new trial in such cause; and the Court, upon subsequent application, made within one year after the rendering of the second judgment in said cause, if satisfied that justice will thereby be promoted, and the rights of the parties more satisfactorily ascertained and established, may vacate the judgment and grant another new trial; but no more than two new trials shall be granted under this section."

This section was repealed by act of the Legislature in 1862, and said repealing act repealed, and said Sec. 30 re-enacted in 1866, and was continued as the law of this

State until the adoption of the Civil Code in October, 1877, when the act concerning ejectment, of which Sec. 30 was a part, was entirely repealed, and Sec. 254 of the Civil Code, already quoted, was adopted. It will be observed that the language of this Sec. 254 is materially different from the language used by the act of 1861 and the Revised Statutes of 1868, and also different from that of all the other States to which attention has been called.

In all of these, except Illinois, the statutes, in words, limits the right to a new trial, as of course, to one new trial, giving one other new trial as a matter of discretion, if the Court, in its judgment, was satisfied that justice would be promoted thereby.

The statute in Illinois alone, in words, restricting the two new trials, that might be granted under that section, including the right to a trial as of course, and the right to a trial at the discretion of the Court to the same party.

The language used in the statute of Illinois, clearly we think, implies that each party would be entitled to a new trial as of course, and also to a new trial at the discretion of the Court, inasmuch as by the language used, "no more than two new trials shall be granted to the same party," and so the Supreme Court of Illinois, in the case of Chamberlain aguinst McCarty (63d Ill., page 263,) have decided, and as the case is short, we give the opinion of the Court in full, as follows:

"*Per Curiam:* The only question presented by this record is, whether each party to an action of ejectment is entitled to a new trial as a matter of right.

"The section in the chapter entitled 'Ejectment' should receive a liberal construction.

"The title to real estate is determined by the action of ejectment, and not the mere possession as formerly, and ample opportunity should be afforded to each party to exhibit

his title and prove his rights. By a fair construction of the statute under consideration, it was certainly the intention of the Legislature to give to each party a new trial as a matter of course, upon compliance with the statute. The intent of the statute could not be carried into effect by confining the absolute right to a new trial to one party.

"Such has been the construction of this statute by the Courts and the profession for more than a quarter of a century, and we must give to it our assent.

"The judgment is reversed and the cause remanded."

It is respectfully submitted that the decision in this case that the statute granting new trials in ejectment cases, as of right, should be liberally construed, is good law, and is especially applicable to the condition of affairs in Colorado and to the statute under which the motion for new trial was made. The necessity for statutes of this character doubtless grew out of the fact that under the statutes of these States the action of ejectment is used to determine the title, and not the possession merely, as under the old practice, and, further, because the statutes also provided that after a certain length of time, a judgment in ejectment should be conclusive in respect to the title found. Under the old practice a judgment in ejectment concluded nobody, and the plaintiff could bring as many actions as he saw fit, until restrained by injunction, hence he suffered little by defeat, and had no pressing necessity for a new trial at the hands of the Court, since he could bring a new suit at any time.

Tyler on Eject., 592.
Jackson vs. Tuttle, 9 Cow., 233.
Bradford vs. Bradford, 5 Conn., 127.
Hopkins vs. McLauren, 4 Cow., 667.
White vs. Kyle, 1 Serg. & Rawle, 515.

Under the old practice it was held that "the Courts will seldom grant a new trial in ejectment when the verdict is given for the defendant, because all parties remaining in the situation they were previously to the commencement of the action, the claimant may bring a second ejectment without submitting himself to additional difficulties, *but* the principle does not apply when the verdict is given against the defendant. The possession is then changed," etc.

2 Stephen's Nisi Prius, 1454.
Adams on Eject., 926.

Now if this was the doctrine when the action determined possession only, how much more ought it to be the doctrine when the action is used to determine both title and possession? Again we submit that Sec. 254 of the Code of Colorado indicates as clearly the intention of the Legislature to give to *each* party *one* new trial as did the statute of Illinois, which the Court held by a fair construction gave such right. The word *each*, as used by the Court, nowhere appears in either statute, but the right of each is deduced from the provision that the party against whom a judgment has been rendered should be entitled to a new trial, as of right, and that the Court might in its discretion grant a new trial.

Sec. 254 provides that *either* party against whom there is a judgment in ejectment shall be entitled to a new trial as of right, on payment of costs, and that "*neither party shall have but one new trial* in any case as of right without showing cause." The language is awkward, but the meaning is plain, that no matter whether the judgment was against plaintiff or defendant, he should be entitled to a new trial, but neither party shall have but *one*. Now, we submit that the expression, "neither shall have but one," is equivalent in expression to saying *each* or either shall be entitled

to *one*, and only one new trial, except for cause. It will be observed too, that unless this construction be adopted, the effect of the statute must be to restrict not *each* party to one new trial as of right, but to restrict the new trial to one, since the exercise of the right by one party is to exclude the other party from any right whatever under the statute. In other words, if the ruling of the Court in the case was correct, then the right given, clearly to both by the language thereof, can be used by one party only, and a right so important that it is found in the statutes of a half a dozen States besides Colorado—secured by statute to each party, is taken away from the one by its exercise by the other. Suppose then, and in this supposition we need not suppose, for it is a matter of general practice, both in the Federal and State Courts, the plaintiff on trial offers *no* proof, judgment is entered against him, he pays costs, and on his motion the judgment is vacated, now, by the ruling in this case, this exercise of his right, although done purposely to secure such an end, and giving the defendant no knowledge whatever of plaintiff's claim, deprives the defendant of a new trial, except for cause, as in other cases.

Again, under the law as it stands in New York, and as it stood in Colorado prior to October, 1877, two new trials might be had under the statute by express provision—one as of right, and one at discretion of the Judge, while, as we have seen, in Illinois *each* party is entitled to one as of right, and one at discretion of the Judge; but, if the construction adopted by the Court in this cause be correct, there is but *one* new trial, as of right, and none at discretion of Court, except as in other causes. It will be seen, also, that the phraseology of the statute of 1877 is radically different from that of 1868, and by familiar law, as applied to the interpretation of statutes, and to which we need cite no authorities, a change of language

implies and presupposes a change of intention by the Legislature, and, as the intention of the Legislature is the guiding star to judicial interpretation, we submit that the Legislature must have intended to change the law, and that they did change it, by giving to *each* party one new trial, as of right, in place of the two new trials—one of right and one at discretion, as given by the former statute seems to us clear. Beside this, the statutes, prior to that of 1877, were *remedial*, and were intended to enlarge the rights of litigants, the better to protect their titles and promote justice, as is seen by the provision of the law itself, and gave the losing party a year, after rendition of second judgment, within which he could invoke the discretion of the Court, and this statute, being in *pari materia*, must be taken into consideration in determining the meaning of the statute of 1877. Can it be presumed, then, that the Legislature, after having twice enacted the law of 1868, giving the enlarged rights and remedies to litigants in ejectment cases, has all at once concluded to make a new departure, cast off the discretion of the Court, and enact that only *one* new trial can be had in these cases, except for cause? Is it not apparent, from the known legislation, and obvious intent thereof, as well as from the language of the act itself, that the intent was to enlarge the right of parties litigant by giving each party a *right* to one new trial, as of course, and leave the Court no discretion, except as in other cases? To us it seems to be clearly so. There is one other view to be taken of this case, in common with all cases of ejectment, relating to title to mining property. Mining property, its discovery, acquisition of title thereto, and its segregation from the public domain by the act of the discoverer, as well as the subsequent derivation of patent from the Government, is an anomaly.

By the U. S. Statutes of 1866 and 1872, R. S., Sec. 2318,

et seq., the discoverer and locator of mining property gets an inchoate title that may ripen into a legal title and entitle him to a patent from the Government. But, by the same statute, all disputes as to title and right to procure a patent must be determined by the Courts, and under the law and practice of Colorado, these rights, if litigated, are determined by suits in ejectment. The determination of such a suit involves not only all questions known to law relative to titles, but a thousand and one questions, as every mining lawyer knows, relating to the identity of veins, crossing and displacement of veins, as well all the various questions in metallurgy and geology that bear upon the question of identity of such veins. One party applies for a patent, another party claims by prior discovery and claims the lodes are identical; now the second party must, within sixty days, adverse the party seeking a patent, and within thirty days thereafter begin suit, in the nature of ejectment, to determine the rights of the parties. A large amount of *work* is frequently necessary to prove the identity of the vein; plaintiff has been *compelled* to begin suit, although not prepared to prove his case clearly by reason of non-development. This statute was and is designated to *aid* him in securing his right, and properly administered it does aid him; but with the construction put upon it in this case, it may become an instrument of wrong and oppression, since the plaintiff could deprive the defendant of a new trial by submitting to judgment, or the defendant could do the same by the plaintiff, and in either case, in many instances, deprive the party of the advantage to be derived from the time and opportunity sought to be secured to him for development and identification of the property. Under the law as it stood in 1868, all these questions as to identity and what development to be made might be expected to show, were addressed to the discretion of the Court, but

since that discretion is taken away, we submit parties ought not to be deprived of these advantages unless the statute is imperative.

Hence we think this statute should be so interpreted as to enlarge and not restrain the rights of parties, and that the ruling in the case was error.

Second—The Court erred in instructing the jury as follows, (see Record, folio 240):

"That if they believed from the evidence that the defendant and John Turk were co-owners of the Equator lode, and as such owners made application on the 14th day of May, 1869, in accordance with the laws of the United States, to obtain a patent therefor, and in accordance with said laws did give the proper notice of the intention to enter said lode; that such application was notice to all of what they claimed, and if no adverse claim was filed, or was filed and not prosecuted successfully, and the Government issued a patent on such application, any discovery made subsequent to such application, if made on said Equator lode, or any other lode that in its course unites with the Equator within the lines of said location, will be held by the owners of the said Equator lode, because of priority of title and location of said lode.

"*Second*—That, if the jury believe from the evidence that the Equator lode was discovered and marked by the defendant or its grantors prior to May 14th, 1869, and that at that time the defendant and John Turk, a co-owner with the defendant, made application for a patent to 1400 feet on said lode, in accordance with the statutes of the United States, and that subsequently the Government issued a patent on such application, then the title of the defendant must be considered as relating to the time of the application at least, and in effect the pa-

ent of is the senior patent, and that the defendant will take the lode described in the patent; and if the lode of plaintiffs enters and joins with that of defendant, the defendant, by priority of title, is entitled to the lode beyond such junction.

"*Third*—That, if the jury believe from the evidence that the grantors of the defendant made a location on what they called the Equator lode, and took twenty-five feet on each side of what they called center of the crevice, and on the 14th of May, 1869, made application to patent the same under the laws of the United States, and the Government did issue a patent therefore under such application, then defendant is entitled to all ore measures, veins or parts of veins, the apex of which was within the side-lines of said patent, unless the same was held adversely to the defendants on or before the 10th day of May, 1872, and if said lode on which the defendants' grantors was more than the width of the surface of the ground allowed by local laws, to wit: twenty-five feet, still the defendants would be entitled to such ore measures or veins as had the apex within said side-lines, and had the right to follow the same on the downward course, although such veins or ore measures may so far depart from a perpendicular in the course downward as to extend outside the vertical side-lines of said surface location.

"*Fourth*—That, if the jury believe from the evidence that the grantors of the defendant discovered the Equator lode, so called, and worked and mined therein, and subsequently defendant obtained a patent from the Government of the United States to the said Equator lode, the defendant is entitled to all the ore measures, the apex of which are found within the side-lines of the said patent of the Equator lode, and of the said ore measures departing from a perpendicular in their course downward so as

to extend outside of the vertical side-lines, the defendant may follow such ore measures outside of the vertical side-lines to any depth of said ore measures, if said ore measures were not held adversely to defendants or their grantors on or before May 10th, 1872.

"*Fifth*—That, if a miner goes on a lode or ledge, and makes a location thereon, according to law, and, because of the width of the lode, does not by his surface-lines cover all the apex, still he will be entitled to the possession of that part of the lode so claimed by him, and his rights to that part of the lode the apex of which is within his side-lines is the same as it would have been if the surface had covered the entire apex of the lode.

"*Sixth*—That, if a miner makes a location on a lode or ledge, and, by mistake, he does not, *by* his location, include the whole apex or top of said lode or ledge, yet he will be entitled to hold so much of the said lode or ledge as is within the side-lines of his surface location, and of the veins within his side-lines which shall depart from a perpendicular in its downward course as to extend outside of the vertical side-lines, he may follow the same.

"*Seventh*—That the surface land taken up in connection with a linear location on the ledge or lode is, under the act of 1866, solely for the convenient working of the mine, and does not measure the miner's right to follow the dips, angles and variations of the vein."

Third—We assign for error of the Court in instructing the jury as follows:

"That there is introduced, both by plaintiffs and defendant, evidence tending to prove that the claims of both parties are located on the same vein or lode of mineral bearing rock in place, the general apex or upper surface of which is about 100 feet wide.

"If the jury believe this to be true, then I instruct you, as the law of this case, that plaintiffs have the prior title from the United States to that portion of this lode within the lines of their patent, extending vertically downwards to the earth's center; and the defendant having contested plaintiffs' right to run a patent for the grounds of the lode in controversy in the Court of the Territory, according to the act of Congress on that subject, and failed in that contest, and having accepted and read in evidence a patent for their own claim, which expressly excepts out of its granting clause the interfering part in plaintiffs' said patent, the law of the case is for the plaintiffs, and they are entitled to all the mineral found within the side-lines of their patent extending vertically downward."

The facts in this case, proved beyond all dispute, are in brief as follows:

The Equator lode was discovered prior to May, 1869, and was duly staked and recorded under the laws of the Territory and under the laws of the United States, and possession taken thereof, and developments continued from that time up until the time of the commencement of this suit. The discoverers and their grantees, including plaintiff in error, all the time remaining in possession. The lode proved to be of great value, and producing, prior to the discovery of the so-called Colorado Central lode, at least $200,000, and having a value of not less than half a million.

The Colorado Central lode was discovered some time in 1874, and, by the evidence, as well as by the claim of defendants in error, is identical with the Equator lode.

The owners of the Equator applied for a patent to said lode in May, 1869, and the patent was issued to the Equator Mining and Smelting Company on the 18th day of April, 1876, having been delayed by reason of adverse claims.

The patent to the Colorado Central lode was issued to the defendants in error, or their grantors, July 21, 1875. On the trial it was proved beyond dispute, and by the admission and evidence, or by the evidence on both sides, that the Equator lode, or vein, was from seventy-five to one hundred feet in width; and that the lode patented to the defendants as the Colorado Central lode was identical with the Equator lode, and that the property described in the complaint as the Colorado Central lode, covered a very considerable portion of the same ground patented as the Equator lode.

First—We claim error in refusing to instruct the jury as set forth in instruction numbered one; which is in substance, that any discovery made subsequent to an application by plaintiffs in error for title on the Equator lode, would be subject to the rights of the party having made the first application.

By the law as it existed in 1869, the application for patent to lode property was not only filed in the Land Office, but a plat, survey and description of lode was to be posted upon the lode itself; and we claim that the location made before application for patent, together with the application in the Land Office and said posting of notice, was a segregation of all that portion of the vein described in the location and plat, from the public domain, and could not be taken by any subsequent discovery and location; and that no failure on the part of the applicant to contest the subsequent location affected the title acquired by the subsequent issue of the patent.

The proof in this case, as will be seen by reference to the evidence, is indisputable, that such location, application and posting of notice, was done years before the discovery or location of the Colorado Central lode.

We also claim that instruction marked number two,

refused by the Court, is a correct statement of the law applicable to the case.

That upon well established legal principles, title of the plaintiff in error when patent was obtained, went back by relation to the time when the first application was made, so as to exclude any title acquired by subsequent discovery or location, and that, too, without any reference to whether an adverse claim was or was not filed, or what the action of the Court was upon such adverse claim, no adverse claim being necessary in such case.

We also claim error in refusing the third and fourth instructions, on the grounds that the third and fourth instructions correctly stated the rights of the plaintiff in error to the said lode property, as defined by the act of May 10, 1872, and contained in section 2328 of the Revised Statutes, inasmuch as the evidence clearly showed that no adverse rights existed against the plaintiff in error in this case as to such property, on the 10th of May, 1872, and hence all rights acquired by it or its grantors, either by location or by patent, was saved to it, by the operation of the said statute.

We also claim that the Court erred in refusing the fifth instruction, for the reason that the law, as it existed prior to May 10, 1872, and as it existed at the time of the discovery and location of the Equator lode, and as it existed at the time application for patent therefor was made, no person could take in width to exceed fifty feet, either of vein or surface, except as to implication being allowed to take the whole vein, his discovery or location might be said to include the whole, and give him rights as against every other person claiming any part thereof.

Hence, if a miner makes location on such lode or ledge,

and did not, either by mistake or because of the limitation of the lode in width, include more than a fifty foot vein within his location or application, yet, he being in possession thereof, no other party could acquire any right thereto by discovery or location, that could in any manner conflict with his rights to the entire vein.

Again, we claim error in the instruction of the Court, and the only instruction given to the jury. Such instruction is based upon the idea that the plaintiff in error, although prior in point of time as to discovery, location and application for patent, to that of the discovery of the Colorado Central lode, was not under obligation to file adverse claim, and contest the rights of the parties claiming the Colorado Central.

This, we claim, is error, for the reason that Sec. 2328 of the Revised Statutes, declared that all patents for mining claims heretofore issued, should convey all the rights and privileges conferred by that chapter, where no adverse claim existed on May 10th, 1872; and as the proof shows no adverse claim did exist, and as it also shows the patent was issued and by law relates back to the time of the application, therefore, the rights of the parties are precisely the same as though patent had actually issued before the passage of the law of 1872.

In conclusion, we admit that the Supreme Court of the State has never had occasion to pass upon the statute relating to new trials, nor did the Supreme Court of the Territory or State ever pass upon the law of 1868, for the reason that the right of such party to a new trial was never, to our knowledge, denied by the District Court of the State, and we submit that this being so, and it being a question of doubt, property that was held, owned and

possessed by plaintiff in error, and upon which large amounts of money were expended for years before any right of any kind accrued to defendants in error, ought not to be taken from the former upon any doubtful construction of a law that was intended to meet such a case, and promote justice in such an adjudication.

H. M. TELLER,
Attorney for Plaintiff in Error.